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ABSTRACT

Designed as a resource and aid for faculty and administrators at Modesto Junior College (MJC), this report provides an assessment of the external environment of the college and of its mission and goals. Section I introduces the futurist perspective and assumptions serving as the basis for the report. Section II provides a summary of an extensive review of the literature, interviews with forecasters and planners, and observations by leaders in higher education on the following topics: lifestyle and social change, demography, economic trends, technological trends, employment opportunities and education, postsecondary trends, and public policy. Following a discussion of the statewide view of community college mission and goals, section III presents the results of surveys of community leaders and MJC faculty conducted to determine their views of the functions and performance of the college, as well as factors to consider in developing or reviewing program priorities and community involvement in college activities. Section IV summarizes the inferences drawn from the environmental assessment and section V discusses implications of the study for the college, focusing on actions the college will take to remain a viable part of its geographical and educational community, actions necessitated by the changing community and student body, emphases of instructional programs, effects of technological and workforce changes, and college responses to public policy issues. Questionnaires and an extensive bibliography are included. (AYC)

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PLANNING FOR THE FUTURE

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JC 840 346

An Assessment of the External Environment:
Identifying Problems, Constraints, and Opportunities

February, 1984

Dr. Pamila Fisher
Coordinator of Needs Assessment Task Force

FIRST EDITION

prepared by

Modesto Junior College

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ACKNOWLEDGEMENTS

The successful completion of a project of this magnitude is possible only with the assistance of numerous people. Such was the case for MJC: PLANNING FOR THE FUTURE. Without the administrative support and enthusiasm of Dr. Louis Zellers, President, and Dr. Patricia Wirth, Chief Instructional Officer, this project never would have begun. Commitment, energy, and suggestions were provided regularly by the Community Needs Task Force, Mr. Don Roe, Mr. Steve Collins, Dr. Stan Hodges, and Ms. Jeanne Palmie.

Ideas, inspiration and reflection were readily available from colleagues on and off this campus. From MJC these included, among others, Mr. Ted Hamilton, Mr. Ron Manzoni, Mr. Ken Savage, and Ms. Kathy Short. From other institutions, these included Dr. Suzanne Adams (Laney College), Dr. Janis Cox Coffey (Los Rios District), Dr. Helen Gordon (Bakersfield College), and Mr. Peter Hirsch (Associate Director of the California Association of Community Colleges). A special thank-you, however, is due Dr. Jim Lucas (DeAnza College) for his insightful approach to planning and his enthusiastic willingness to share his expertise.

Translating these ideas into a useful product required the skills of other staff as well. Credit for the physical product is due Joan Barton, Norene Dexter, Kathy Goman, Gary Mendenhall, Dave Patton, Joanna Turner, Joyce Turner, Lorraine Van Elsyk, and Judy Weatherford. Still others contributed in a variety of ways to make this possible.

It was a pleasure to work with these people in what was sometimes an arduous but always exciting endeavor.

Thank-you all!

Dr. Pamila J. Fisher
Coordinator, Needs Assessment Project

FOREWORD

The information provided through the "MJC Planning for the Future Project" is offered as a resource and aid to faculty and administrators in moving into the Information Age.

MJC has been deeply involved in assessment of goals and objectives; however, it is also important to continue to compare our perceptions with identified trends and changes within the nation and community.

The process used to develop the following document included the selection, by a college committee, of Dr. Pamila Fisher as Research Coordinator. Dr. Fisher was assisted by a task force selected by the Division Chairpersons' Council. Dr. Fisher developed objectives for the project with the task force, and the task force participated in gleaning pertinent summaries from the extensive information provided. Periodic reports of progress were shared with division chairs. Faculty and administrators were invited to join in a review of the research with MJC President, Dr. Louis Zellers, on February 1, 1984. This group also was asked to participate in discussion of inferences and implications derived from the research, and to add others as well. A final report of findings was provided to faculty, adminstrators, and staff for their use. I want to thank all those who participated in this project.

The value of any research is demonstrated through its use. I will be pleased to share the results of my 1982/1983 goal to provide faculty, staff, and administrators with information resulting from many MJC participants as a resource and aid for planning curriculum and related support services into the 1990's.

Dr. Patricia Wirth
Chief Instructional Officer

MJC PLANNING FOR THE FUTURE

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SECTION I

INTRODUCTION

While there are differing views of what the future will hold for community colleges, there is consensus that it will be different and that change and flexibility will be required if the institution is to avoid obsolescence. The optimistic forecasters also remind us that one need not be a passive participant in this process. To the contrary, the careful study of trends and issues, followed by proactive measures, actually can shape some aspects of the future.

Comprehensive planning contributes to the process of coping with, and benefiting from, the future. Such planning reviews trends, considers alternatives, and provides direction. Short-term forecasting is one facet of this activity, as is the thorough examination of external and internal strengths and weaknesses. Modesto Junior College has, for some time, been involved in internal review through the use of enrollment data, follow-up studies, and District Assessment. Other critical research studies are planned.

The purpose of this report is limited to examining the external environment in which MJC must operate. This identification of constraints and opportunities, combined with critical internal review, should provide guidance for program planning decisions, thus making it possible to match strengths with opportunities.

Several assumptions serve as a basis for this study and report. One is that an on-going system of research reviewing the success of current programs and the characteristics of the external environment is important and needed. However, to the extent that a study is considered in isolation, or not updated regularly, its validity diminishes accordingly. At the same time, the mechanical collection of "objective" lists of numbers does not necessarily represent good research, nor led to good planning. Exemplary planning requires the consideration of many ambiguous variables (issues, philosophies, and trends, as well as facts) in a creative fashion so that the finished product (which must be continuously revised) is a vital, dynamic plan of action. It is further assumed that well-informed faculty and administrators may draw inferences from these findings which can then be translated into programs and support service changes or modifications.

The futurist perspective is of value to those doing educational planning. If we accept that the future is at least partially a created reality, not just the consequence of random events, then it is apparent why we must direct our attention to it. By combining local action with a global perspective, it is possible to conceive future paths, choose our preference, and work to implement it.

SECTION II

ENVIRONMENTAL ASSESSMENT

An environmental assessment is the process of identifying and analyzing characteristics of society which may pose problems, constraints, or opportunities for the community college. By focusing on trends or potential changes, inferences may be drawn. While the purpose is not to set goals, the realistic picture provided should assist those persons making planning decisions.

The following section includes a description of relevant characteristics:

* Lifestyle and social changes
* Demography
* Economic trends
* Technological
* Employment opportunities and education
* Post-secondary trends
* Public policy

The material presented is a summary of an extensive review of the literature, interviews with forecasters and planners, and observations by leaders in higher education. References are listed in the appendix and more detailed information is available from the Coordinator for Needs Assessment.

The implications for community colleges that are derived from this material reflect the contributions of the Needs Assessment Task Force, the Division Chairperson's Council, the faculty and administration of Modesto Junior College, and the thoughts and insights of community, state and national leaders. While these are, by definition, somewhat speculative, they can serve collectively as valid guideposts to planning as long as they are reviewed and updated in a timely and consistent fashion.

ENVIRONMENTAL ASSESSMENT

A. LIFESTYLE AND SOCIAL CHANGE

The society from which most community college students of the future will come, and that all will have to learn to live within, is dramatically different than that which most of us were led to expect during our own years of formal schooling. A product of The Third Wave, and characterized by Megatrends, this new society will demand new qualities from the educated person.

The Megatrends which John Naisbitt has described provide a structure for understanding the major changes occurring in our society. Table One summarizes these ten phenomenon (see Table One). Pervasive to all of them is number one, the shift from an industrial to an information society. Even as we become more cognizant of the entire world, sophisticated technology, and the need for long-term planning, other forces are refocusing on the individual. The move toward de-centralization, self-reliance, participatory democracy, and networking are examples.

A variety of lifestyles, an expanded definition of family, a closer link between home and work as exemplified by the "electronics cottage," and the need to make choices from many options which may challenge traditional values, will prevail. Sociologists forecast that some of these changes will be reflected in later marriages, more divorce and remarriage, an increase in step and blended families, working mothers as the rule rather than the exception, the blurring of sex roles, and a consequent demand for support services such as day care and flexible personnel policies.

The personal changes brought about by societal shifts will include the need to adapt and change--to new work, to new places to live, and to new families. An increased amount of leisure time, and unexpected or unwanted periods of unemployment will mean other activities will have to be found to give lives meaning. Increased tolerance and acceptance of others will be critical in an increasingly dense population. In other words, while advancement in high technology will touch almost all aspects of our lives (work, home, leisure, transportation, communication), the psychological need for human contact (referred to now as "high touch") will remain a high priority.

TABLE ONE

MEGATRENDS

FROM:	TO:
Either/Or	Multiple Option
Industrial Society	Information
Centralized	Decentralized
North	South
National Economy	Global Economy
Sickness	Wellness
Broadcasting	Narrowcasting
Hierarchies	Networking
Managerial	Entrepreneurial
Party Politics	Issues Politics
"Melting Pot"	Cultural Diversity

(John Naisbitt, 1982)

ENVIRONMENTAL ASSESSMENT

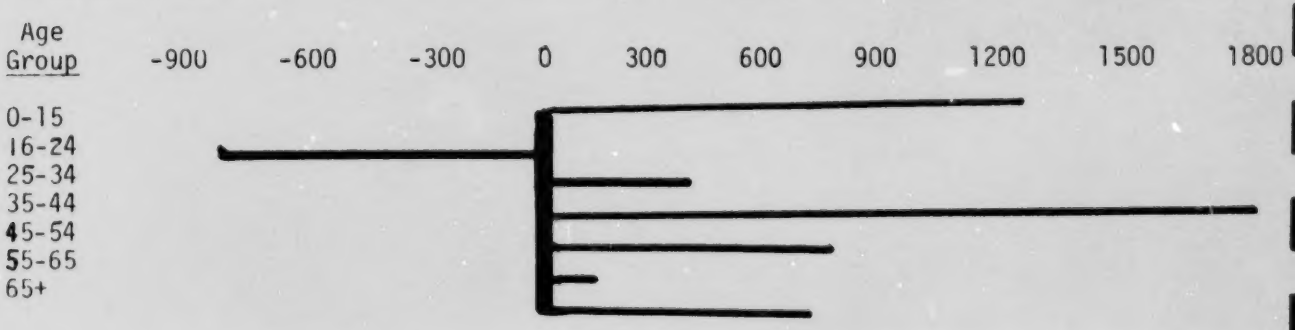
B. DEMOGRAPHICS

The U. S. Census Bureau predicts that by the year 2000 the population of the United States will exceed 267 million. This 18% growth will not, however, be uniformly distributed as the shift will be away from the north and northeast and toward the southwest and Florida. California's share will be 30.6 million, representing a 29% increase. The ethnic minority proportion of the population will increase nationally from 14.4% to 16.9%. In California, however, ethnic minorities are projected to constitute 45% of the state's population by the year 2000.

Another significant change is the shift in age distribution. The nation and the state is aging. The largest increase will be in ages 35-44 years (1.8 million), with next largest increases in 45-54 years and in those over 65 years. The major decline will be in persons between 16-24 years old (see Table Two).

TABLE TWO

CALIFORNIA
GROWTH IN POPULATION BY AGE GROUP
1980-1990
(THOUSANDS)



These shifts mean that for some time there will be a decrease in the number of traditional-aged college students. On the other hand, there will be even more healthy, retired adults with time to fill.

The predictions for location of the population also include a preference for small towns and rural areas, with people being willing to commute in order to live where they want to.

These changes are reflected in projections for Stanislaus County. While this statistical area (Modesto SMSA) does not cover the entire area served by MJC, it does include the major population areas and is the only area so described by the State Census Data Center (see Figure One). Table Three illustrates the somewhat phenomenal growth experienced by this area in the past decade. While this growth rate is projected to decline somewhat (see Table Four) the increase in population is significant. Future growth undoubtedly will be impacted, too, by economic issues described in a later section. This growth is due partially to in-migration, most notably from the San Francisco Bay Area and Los Angeles and Orange Counties (see Table Five).

Stanislaus County
Population of County and Selected Cities
1970, 1980 and 1981

Political Subdivisions	1970	1980	1981	Percent Change	
				1970-1980	1980-1981
Total	194,506	265,902	271,200	36.7	2.0
Ceres.....	6,029	13,281	14,050	120.3	5.8
Hughson.....	-	2,943	2,990	-	1.6
Modesto.....	61,712	106,602	109,000	72.7	2.2
Newman.....	2,505	2,785	2,900	11.2	4.1
Oakdale.....	6,594	8,474	8,675	28.5	2.4
Patterson.....	3,147	3,908	4,060	24.2	3.9
Riverbank.....	3,949	5,695	5,850	44.2	2.7
Turlock.....	13,992	26,287	27,600	87.9	5.0
Waterford.....	2,243	2,683	2,790	19.6	4.0
Balance of County....	94,335	93,244	93,285	-1.2	0.0

Yosemite Community College District

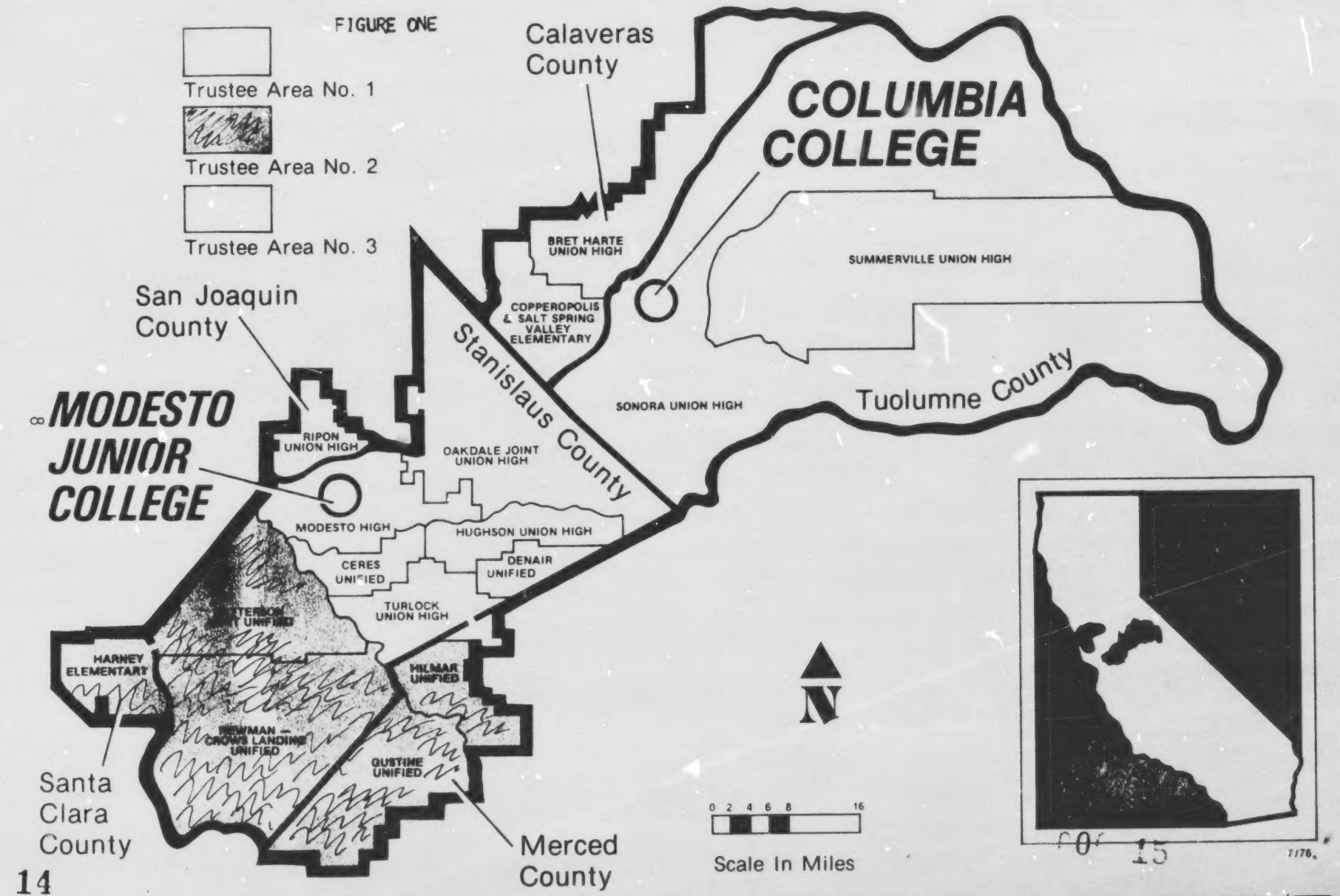


TABLE FOUR

PROJECTED POPULATION FOR STANISLAUS COUNTY

	1980	1985	1990	1995	2000
Population	267,900	303,200	338,400	373,000	403,900
*Growth Rate		13%	12%	10%	8%

*Assumes no dramatic institutional or national changes

Source: State Census Data Center
Population Research Unit
Sacramento, CA

TABLE FIVE

SOURCES OF MIGRATION TO AND FROM STANISLAUS COUNTY FROM DRIVER'S LICENSE ADDRESS CHANGES, AVERAGE ANNUAL TOTAL 1975-1980

Area of origin or destination	In-Migration to Stanislaus Co.		Out-Migration from Stanislaus Co.		Net Migration to Stanislaus Co.	
	Number	%	Number	%	Number	%
Out-of-State	2,036	18.8	1,726	20.8	310	12.4
California	8,764	81.2	6,574	79.2	2,190	87.6
Central Counties	4,010	37.1	3,523	42.4	487	19.5
Sacramento Valley	665	6.2	636	7.7	29	1.2
San Joaquin Valley	2,929	27.2	2,369	28.6	560	22.4
Mother Lode	416	3.8	518	6.2	-102	-4.1
Northern Counties	2,671	24.7	1,679	20.2	992	39.7
San Francisco Bay Area	2,074	19.2	1,157	13.9	917	36.7
Other	597	5.5	522	6.3	75	3.0
Southern Counties	2,083	19.3	1,372	16.5	711	28.4
Los Angeles/Orange	1,204	11.1	681	8.2	523	20.9
Other	879	8.1	691	8.3	188	7.5
Average Annual Total	10,800	100.0	8,300	100.0	2,500	100.0

Since Stanislaus County is the residence of the majority of MJC's students, it is useful to examine more closely the demographic characteristics of that community. Table Six indicates that 22% of the population live in rural areas, including 6% on a farm. The population is approximately 17% minority, an increase from 13% in 1970. Nearly 50,000 people are limited or non-English speaking. The percent of the population under 18 years has declined from 35% in 1970 to 30% in 1980.

TABLE SIX

MODESTO SMSA (STANISLAUS COUNTY) - 1980

NUMBERS

Total Population	284,502
Urban	222,108
Rural Farm	18,052
Rural/NonFarm	44,342

ETHNICITY

White	82.3%
Black	1.06%
Indian	1.5%
Asian	1.5%
Spanish	13.5%

AGE

0-14	76,690	25% of Population
15-59	185,092	61% of Population
60 -	44,375	14% of Population

LANGUAGE (NON-ENGLISH SPEAKING)

	Age 15-17	Age 18-
Spanish	8,615	19,729
Other	3,584	16,648

Enrollment in Stanislaus County schools reflects these figures, both in number and ethnicity (see Tables Seven and Eight). The potential "market" for community college students is revealed in Table Nine. Approximately 140,000 residents have not completed even one year of college.

TABLE SEVEN

ENROLLMENT IN SCHOOL - 1980
MODESTO SMSA

	Total	Public	Private
Nursery School	3,218	1,469	1,749
K and Elementary	41,745	38,952	2,793
High School	18,381	17,113	1,168
College	12,902	12,373	529

TABLE EIGHT

K-12 SCHOOL ENROLLMENT BY ETHNICITY

	White	Black	Indian	Asian	...Spanish*
Number	51,244	859	1,290	1,165	11,869
Percent	85	1.4	2.1	1.9	19.7

*Not a mutually exclusive category; thus, may be counted in another category as well.

TABLE NINE

YEARS OF SCHOOL COMPLETED
MODESTO SMSA (STANISLAUS COUNTY) - 1980

Age	Less Than 3 Years High School	High School 4 Years	College 1-3 Years	College 4+ Years
Persons 18-24	12,696	14,240	7,091	8,959
Persons 25+	62,772	51,500	30,285	18,958

Traditionally, however, college student enrollments have been derived primarily from high school graduation classes. As demonstrated in Table Ten, this source will continue to decline through 1990, and then climb to a new peak in 2000. Since the percentage of high school graduates attending a community college has remained fairly consistent, this portion of the student body will probably decline as well (see Table Eleven), if all other factors remain the same. While some areas in the Southwest will escape this influence, California is predicted to equal the national decline.

Projections by Modesto City Schools indicate that local high schools will follow this pattern. Figure Two indicates any predicted growth will not affect the "traditional" age college student until at least 1995.

TABLE TEN

UNITED STATES STUDENT ENROLLMENTS

Age	Lowest Enrollment Point	Next Peak
5-9 (Grades K-4)	15.4 Million in 1983	19.7 Million in 1994
10-13 (Grades 5-8)	12.6 Million in 1986	16.1 Million in 2000
14-17 (Grades 9-12)	12.8 Million in 1990	16 Million in 2000
All ages	43.4 Million in 1984	51.1 Million in 2000

Note: The trend is dissimilar by region. Sunbelt states will experience almost no decline while enrollments in frostbelt colleges will decline 30-55% by 1995.

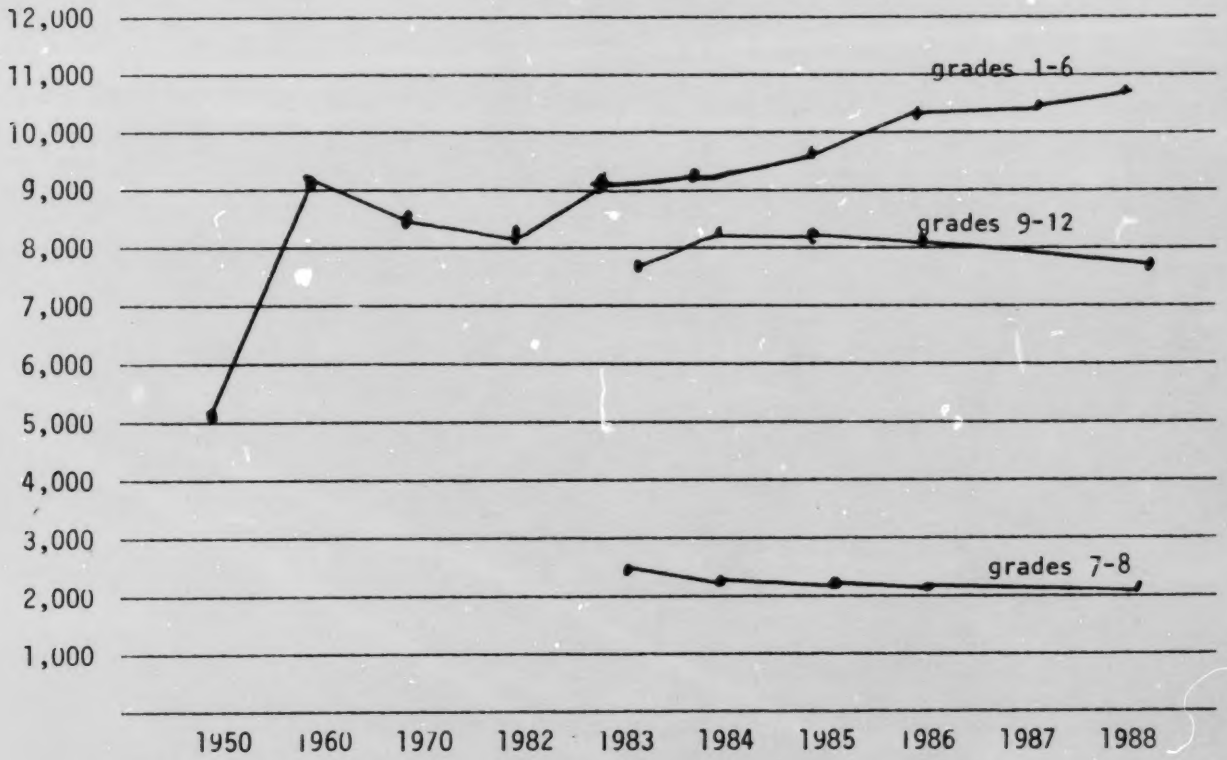
TABLE ELEVEN

FIRST-TIME FRESHMEN 19 YEARS OLD OR YOUNGER
AS A PERCENT OF THE PREVIOUS JUNE'S SCHOOL GRADUATES

Year	Number of High School Graduates	UC	Percentage Enrolling as Freshmen in				Grand Total
			CSU	CCC	Total	Independent	
1975	293,941	5.3	7.5	43.1	55.9	—	—
1976	289,454	5.1	7.8	41.7	54.6	—	—
1977	285,360	5.2	8.0	43.3	56.5	3.6	60.1
1978	283,841	5.5	8.4	41.4	55.3	3.4	58.7
1979	278,548	5.8	8.7	42.1	56.6	3.4	60.0
1980	270,971	6.0	9.0	43.0	58.0	3.5	61.5

FIGURE TWO

SCHOOL ENROLLMENT AND PROJECTIONS
CITY OF MODESTO



	1950	1960	1970	1982	1983	1984	1985	1986	1987	1988
Grades 1-6	5,286	9,089	8,758	8,581	9,100	9,390	9,842	10,342		10,859
Grades 7-8					2,543	2,422	2,307	2,307		2,312
Grades 9-12					7,966	8,145	8,195	8,099		7,964

A close look at MJC Enrollment Data leads to the conclusion that MJC students have not changed dramatically in the last five years. Females remain a slight majority of the students. The average age is between 27 and 28 years. There is a difference, though, between day and evening students, with the mean age for evening students being six years older. While half of the day students are part-time, more than 98% of the evening students are part-time (see Table Twelve).

TABLE TWELVE

MJC ENROLLMENT DATA
1979-1983

Male-Female % of Student Body in Graded Classes

	1979	1980	1981	1982	1983
Male	45.5	44.7	44.8	47.8	45.7
Female	54.5	55.3	55.2	52.2	54.3

Average Age of Students in Graded Classes

	1979	1980	1981	1982	1983
Day	25.2	25.7	26.1	25.5	25.2
Evening	31.1	31.3	31.8	31.7	31.7
Total	27.7	28.0	28.3	27.3	27.6

Full-Time/Part-Time Status as % of Total

	1979	1980	1981	1982	1983
	Full-Part	Full-Part	Full-Part	Full-Part	Full-Part
Day	47.1-52.9	45.6-54.4	44.8-55.2	45.8-54.2	48.4-51.6
Evening	2.7-97.3	3.0-97.0	1.2-98.8	1.4-98.6	1.2-98.8

Two trends in enrollment are beginning to evidence themselves. In the last five years there has been an increase in students between 35 and 54 years of age. Ages 17-24 and 25-34 have not changed to any extent. The drop, and then slight increase in students over 55,is probably due to the "defunding" of the Summer of 1982 as this age group often had participated in the courses moved to community services or eliminated entirely. Perhaps the most important consideration in Table Thirteen is the fact that students in the traditional age bracket comprise only about 60% of the day student body and 20% of the evening population. Students from 25-54 years comprise about 35% of the day student body and 65% of the evening. In other words, this age group already is a significant part of MJC's constituency.

TABLE THIRTEEN

MJC ENROLLMENT BY AGE BY DAY/EVENING
1980-1983

	1980		1981		1982		1983	
	% of Students		% of Students		% of Students		% of Students	
	Day	Evening	Day	Evening	Day	Evening	Day	Evening
17-24	62.8	31.8	60.0	29.2	62.6	30.5	64.4	30.1
25-34	21.8	38.5	23.5	38.7	23.6	38.1	21.6	36.5
35-54	12.1	25.3	13.4	26.7	12.4	27.9	12.0	29.0
55 -	3.3	4.4	3.1	5.4	2.4	3.5	2.1	4.6

Another slight trend worth exploring further is that demonstrated in Table Fourteen. While the major source of MJC's students has always been continuing students, this percentage has recently increased. This is due to the fact that the number of first-time and first-time transfer students has declined. Among evening students these two trends are compounded by a dramatic decrease in the number of returning students. Whether these changes reflect demographic shifts or are erratic twists due to the absence of funding and negative publicity (defunding, discussion of tuition, and cancellation of classes) remains to be determined.

TABLE FOURTEEN

MJC SOURCE OF DAY GRADED STUDENTS

	1980		1981		1982		1983	
	#	%	#	%	#	%	#	%
First Time	1535	21.6	1881	23.8	1919	24.8	1542	21.8
Continuing	3966	55.9	4371	55.4	4300	55.5	4135	58.5
Returning	1153	16.2	1183	15.0	1118	14.4	1067	15.1
First-Time Transfer	342	4.8	336	4.3	337	4.4	275	3.9
Returning Transfer	107	1.5	117	1.5	71	.9	48	.7
Total	7103		7888		7745		7067	

MJC SOURCE OF EVENING GRADED STUDENTS

	1980		1981		1982		1983	
	#	%	#	%	#	%	#	%
First Time	813	15.0	871	18.1	601	17.0	632	15.3
Continuing	2365	44.8	2023	42.0	1590	44.9	1736	41.9
Returning	1559	29.5	1394	29.0	1049	29.6	1420	34.3
First-Time Transfer	340	6.4	358	7.4	207	5.8	257	6.2
Returning Transfer	208	3.9	170	3.5	95	2.7	93	2.3

MJC's efforts to serve minority and handicapped students are partially demonstrated in Tables Fifteen and Sixteen. It should be noted that these comparisons are for the total population, not high school graduates, which are those traditionally thought eligible to attend MJC. Additionally, complete data regarding the number of handicapped served is not available. However, between 1984 and 2000 these numbers can be expected to increase significantly (see Figure Three).

TABLE FIFTEEN

HANDICAPPED POPULATION AS PERCENT OF TOTAL

	1981-1982		1982-1983		Projected 1983-1984	
	#	%	#	%	#	%
*Stanislaus County	15,954	- 6.0	16,596	- 6.0	17,184	- 6.0
**MJC Student Body	12,704	- N/A	11,287	- N/A	11,205	- N/A
***MJC Handicapped	422	- 3.3	446	- 3.9	492	- 4.3

*State Department of Rehabilitation uses 6% of total population to estimate this number.

**Enrollment data for full-time/part-time graded in fall of year.

***Figures compiled by Disability Services Office. However, not all students use this support service. Thus, the count does not include all those attending MJC.

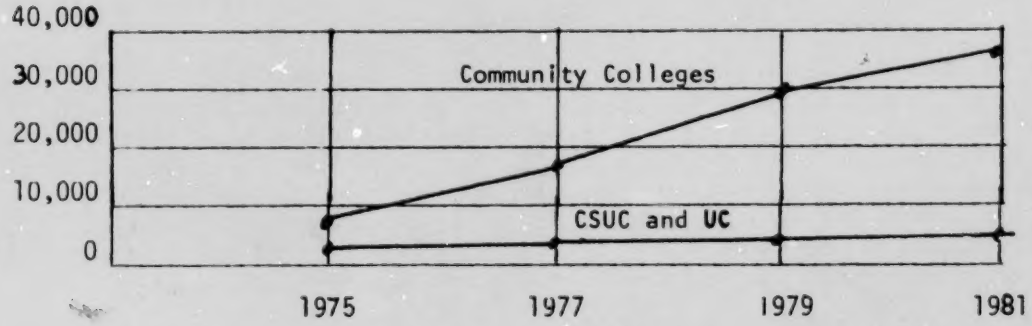
TABLE SIXTEEN

MINORITY POPULATION AS PERCENT OF TOTAL

Ethnicity	Stanislaus County	MJC 1983
White	82.3%	74.0%
Black	1.0%	1.6%
Indian	1.5%	1.3%
Asian	1.5%	5.6%
Spanish	13.5%	10.0%

FIGURE THREE

HANDICAPPED STUDENTS SERVED BY
POSTSECONDARY EDUCATION IN CALIFORNIA



ENVIRONMENTAL ASSESSMENT

C. ECONOMICS

Understanding prevailing economic trends, let alone predicting future ones, is not an easy nor certain task. Nevertheless, an attempt to describe those economic characteristics that have particular significance to community colleges is appropriate. For example, the value of such description is revealed in the relationship between California community college enrollment and California's unemployment rate (see Figure Four). Additionally, local issues of consequence need to be identified so that college planners may monitor their development more easily.

Economists tend to agree that the current recovery is strong and that it is far better than had been expected a year ago. The transition from recession to recovery for the national economy appears to have occurred. This strength is reflected in decreasing unemployment rates, and increases in personal income, consumer spending, and industrial production. Statewide, these positive indices also exist, as does a significant gain in housing starts.

The near future also will demonstrate that much of the nation's economic strength derives from new or modified industries. There will be less "smokestack" and more "high technology". Agriculture will continue to play a significant role in California, although the focus and skills needed will be different. The market for agricultural products will become increasingly foreign, with domestic demand declining. Businesses in the production of electrical equipment and supplies, metal, and construction will do well. Health and fitness will be a major industry. However, the overwhelming majority of the work force will be involved in the provision of services, and the collection, transmission, and analysis of information. Already the 60% of the work force that can be labeled "information employees" represent a six-fold increase over the past 20 years.

Stanislaus County has become somewhat infamous for its unemployment rate and concurrent problems. These rates, considered in isolation, may be misleading. Closer examination reveals that, particularly in the winter months, many of the unemployed are, in fact, permanent seasonal employees. Another measure of Stanislaus County's economy is the percentage of the population below the poverty level The 11.7% figure is only slightly higher than the state figure of 11.1%. Similarly, the median household income, while below the state average, is higher than that for many counties, including San Joaquin, Merced, San Francisco, and most of those

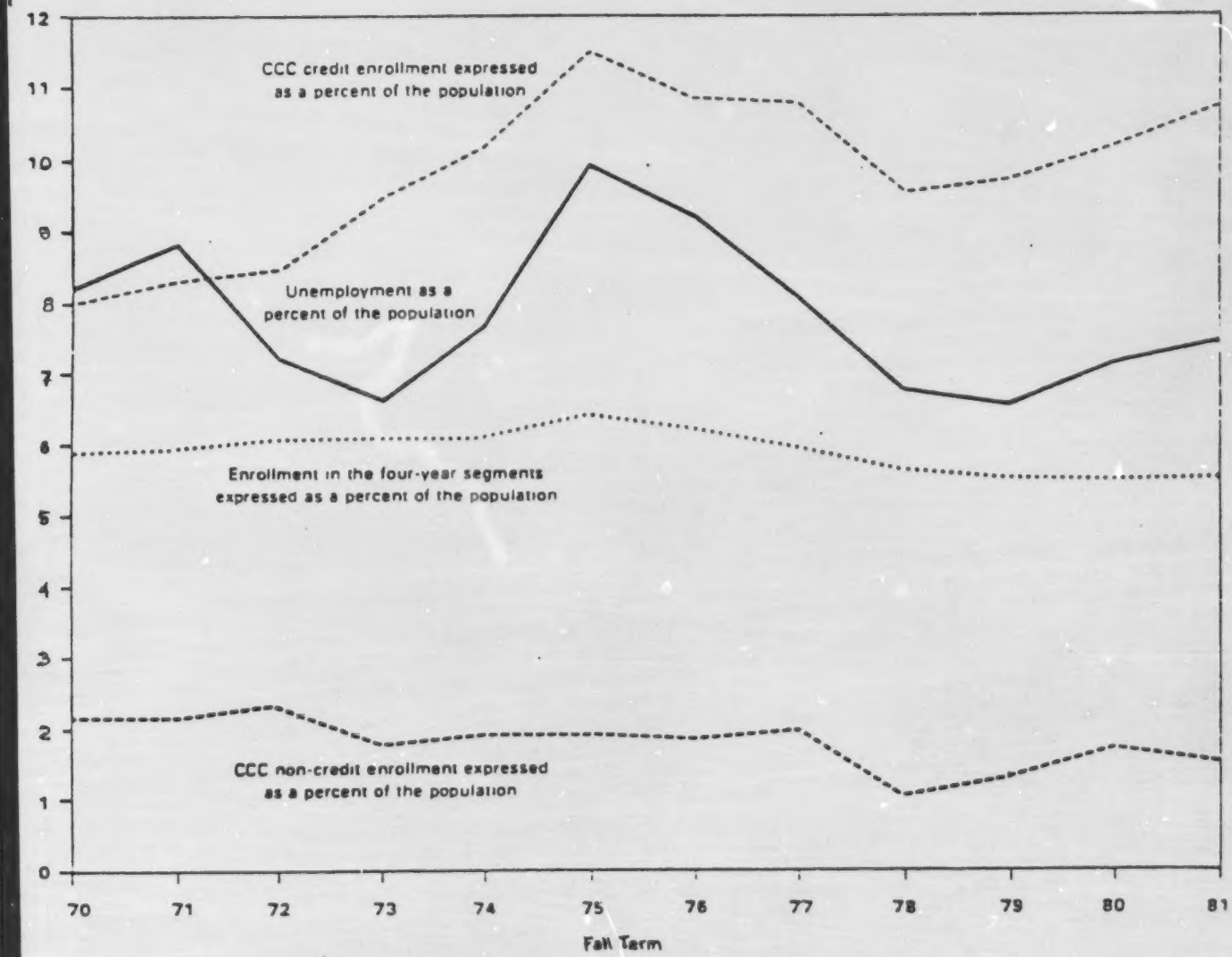
in the central to far north of California. Still another index is the unit value of the "median priced" house. While this price is slightly higher than those in Merced or San Joaquin, it is much lower than those found in the counties of San Francisco, Monterey and Santa Cruz, Los Angeles, and even those of Calaveras or Tuolumne County. Further studies by Sales Marketing firms indicate that Modesto (Stanislaus County) actually is an inexpensive place to live and simultaneously, or perhaps consequently, is relatively affluent in terms of buying power.

These characteristics may help to explain some recent local trends. One is the influx of residents from the more expensive sections of the state, such as the bay area and southern California. Another is the growth and success of retail and service businesses.

FIGURE FOUR

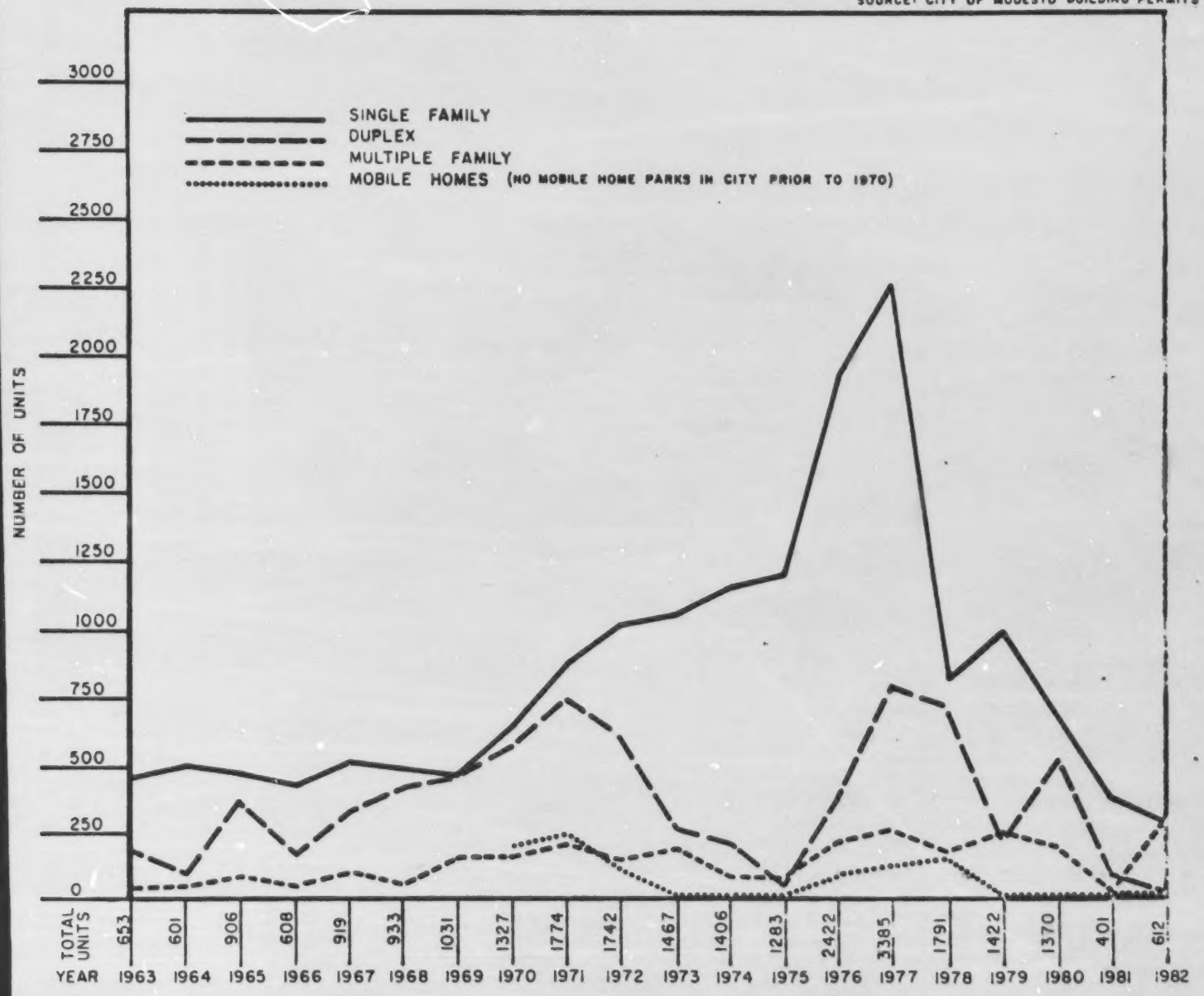
CALIFORNIA'S HEADCOUNT ENROLLMENT AND SEASONALLY ADJUSTED UNEMPLOYMENT EXPRESSED AS A PERCENT OF THE LABOR FORCE

1970 THROUGH 1982 .



NEW RESIDENTIAL UNITS IN THE CITY OF MODESTO - 1963 TO 1982 BY BUILDING PERMITS

FIGURE FIVE



Modesto's rapid growth in the past decade probably contributed to the severity of the recent economic decline. As Modesto grew, the demand for development created much construction related employment. (see Figure Five.) When growth slowed, the recession grew, and interest rates rose, the combination dealt a blow to local construction and contributed further to unemployment and economic decline. Interest rates will have to lower in order for many first time home owners to be able to purchase a home. While home starts were higher for 1983, they are still not meeting the demand and will not until credit is more readily available. In turn, the availability of affordable housing would create jobs, contribute to the local economy, and attract more people to this area.

It is precisely that attraction that is the source of much controversy. City and county planners, along with community advocacy organizations, have argued for "quality of life" and other environmental concerns with regard to growth and development. Others have argued equally hard that economic vitality is dependent upon increased growth of business, industries, and housing developments. While both "sides" concur there is a need for "managed" growth, definitions vary. Most recently, the Modesto City Council has adopted a new policy of implementing an Economic Development Program that appears to share characteristics and goals of that of an Economic Development Commitee of the Chamber of Commerce. Consequently, these efforts to attract new industries and revitalize the economy could have a significant impact on the constituency served by the college. Even this effort, however, will require the resolution of critical and emotionally charged issues with respect to housing and growth.

A specific example of this impact may be found in the discussions of the geographical area known as "College West". Located immediately adjacent to the West Campus of Modesto Junior College, this area appears close to being approved as a light industrial area. If that occurs, the college will be presented with both constraints and opportunities.

Since community college enrollments have tended to rise with unemployment, it could be argued that as the local economy improves, enrollment will decline. The relationship, however, may not be that simplistic. The purposes for attending college may vary with the times. An unemployed constituency may seek training and education. An outstanding post-secondary institution may influence an industries' decision to locate in a particular geographical area. A more affluent constituency may seek upgrading of skills, or personal development. Thriving businesses may be more willing to cooperate in joint educational ventures. Certainly, a healthy state economy is a prereqisite, although no guarantee, for adequate financial support of the college. Thus, college representatives will be committed to working with community leaders to revitalize the local economy.

ENVIRONMENTAL ASSESSMENT

D. TECHNOLOGICAL TRENDS

The emerging technologies, and their applications, are so diverse, numerous, and increasing with such rapidity that most conclude there is no historical precedent for what has already begun to unfold. California has been described as an "emerging industrial information economy." A great deal of effort and investment is going into the research, development, and use of information technology. A sample of these technologies and application may be found in Figures Six and Seven. This technology is certain to affect us in our homes and leisure activities, but especially in the workplace.

HIGH TECHNOLOGY INDUSTRIES

Technologies significantly affecting the California work force in this decade include the areas of communication and information, automation, new materials, agriculture and biological engineering, and energy (see Figure Eight).

Optical disks will restructure the publishing and archiving, audio record/tape, and magnetic memory industries and public and private libraries. The equipment, as well as the business and entertainment content, for broadband communication is likely to originate from California. Computers will predominate in telephone and accounting services. California's production of these and other products will enable it to emerge as a center and distributor of electronic media.

Automation will exist in most manufacturing, mining, and agricultural industries. Assembly jobs will increase through the 1980s, and decline thereafter. California will be among the first to robotize its industries while becoming a major supplier of robots. Built-in expertise (automated service units) will increase. Such complexity is likely to be true of home and automobile equipment as well.

Energy conservation will improve with the sources and users sharing responsibility and roles. The development of new materials (metallic, glass, high-temperature structural ceramics and solid electrolytes) may become critical as they have a defense related application.

Agriculture and biological engineering is another major area of the workforce impacted by new technologies. These create possibilities for California's canning industry which appear promising and may rescue a declining industry. Research in tissue culture and micropropagation will focus on the high-value crops produced by California. California will dominate the recombinant DNA industry. With its many implications for medicine, agriculture, and industrial materials it alone could create hundreds of occupations that do not yet exist and that could employ tens of thousands.

FIGURE SIX

EMERGING TECHNOLOGIES

COMPUTER SCIENCE

ARTIFICIAL INTELLIGENCE
HIGH-LEVEL LANGUAGE
DIGITAL SIGNAL PROCESSING
SPEECH SYNTHESIS
SPEECH RECOGNITION
SPEECH UNDERSTANDING
DIGITIZATION
PACKET SWITCHING
COMPUTER-AIDED DESIGN
ROBOTS
EXPERT SYSTEMS

BIOLOGICAL ENGINEERING

RECOMBINANT DNA
- INSULIN (HUMAN)
- GENE THERAPY
- INTERFERON

HYBRIDOMA
TISSUE CULTURE
ENZYMES
GROWTH HORMONES/VACCINES
FOOD SUPPLIMENTS
EMBRYO TRANSFER
MICROPROPAGATION
AQUCULTURE
FERMENTATION
SOIL-FREE CULTURES
IRRADIATION

ELECTRONICS

MICROPROCESSORS
MEMORY DEVICES
LOGIC ARRAYS
SENSORS
PRODUCTION EQUIPMENT
JOSEPHSON JUNCTIONS
VLSI LITHOGRAPHY
GALLIUM ARSENIDE
BUBBLE MEMORY
TRANSPONDERS
EARTH STATIONS
MICROWAVE

ELECTRO-OPTICS

LASERS
DISPLAYS
FIBER OPTICS
OPTICAL DISC
OPTICAL COMPUTERS
SEMICONDUCTOR LASERS

ENERGY

PHOTOVOLTAICS
NUCLEAR FUSION (HYBRID)
SYNFUELS
- METHANOL
- ETHANOL

FUEL CELLS
SOLAR HOT WATER
ADVANCED FISSION
GEOTHERMAL

MATERIALS

POLYMERS
THIN FILMS
SUPERCONDUCTORS (CRYOGENIC)
METAL MATRIX ALLOYS
CERAMICS
- HIGH-TEMP/STRUCTIONAL
- FIBER REINFORCED
- METALLIC GLASSES
- SOLID ELECTROLYTES

METALS
CUTTING/FORMING
ASSEMBLY
TEST AND INSPECTION
BEARINGS
BRAZING ALLOYS
PRESSURE VESSALS

MISCELLANEOUS

ULTRASOUND
SURFACE PROPERTIES
MEMBRANE TECHNOLOGIES
SUPERCRITICAL FLUIDS
CONTROLLED ATMOSPHERE
OCEAN MINING

FIGURE SEVEN

APPLICATIONS OF TECHNOLOGY

ELECTRONICS

COMPUTERS
PRINTERS, PLOTTERS
DATA STORAGE
TERMINALS
INSTRUMENTS
GUIDANCE SYSTEMS
PERSONAL COMPUTERS
SILICON FOUNDRIES
FAULT-TOLERANT CHIPS
SENSORS

COMMUNICATION

COMPUTER SOFTWARE
VIDEO RECORDERS
MODEMS
DIGITAL PBX
SATELLITES
CAD SYSTEMS
OCR EQUIPMENT
LOCAL NETWORKS
INSTRUMENTATION
MIS SYSTEMS
INFORMATION UTILITIES
RECORDING HEADS
CABLE SHEATHING
WORD PROCESSORS
CRYPTOPGRAPHY

AGRICULTURE

IMPROVED PLANT SPECIES
IMPROVED ANIMAL SPECIES
FOOD PROCESSING
INGREDIENTS
SALT TOLERANCE
DISINFESTATION
PRESERVARION
DEYHDRATION
COOKING

CHEMICALS

BIOCATALYSTS
FINE CHEMICALS
WASTE MANAGEMENT
PROOF TESTING
FILTRATION
EXTRACTION OF CONTAMINANTS

HEALTH

DRUGS
DIAGNOSTICS/TESTS
CAT SCANNERS
NON-INVASIVE TESTING
MICROSURGERY
TREATMENT THERAPIES
IMPLANTS

MINERAL EXTRACTION

MINING
OIL RECOVERY

TRANSPORTATION

AIRCRAFT
JET ENGINES
LIGHTWEIGHT STRUCTURES
ROCKET ENGINES
HEAT ENGINES

ENERGY SOURCE

HEAT EXCHANGERS
TRANSFORMER CORES
PHOTOVOLTAIC ARRAYS
BATTERIES
FUSION REACTORS
WIND GENERATORS
FUELS
SMALL HYDRO
HEAT PUMPS
ENERGY MANAGEMENT CONTROL
COGENERATION

OTHER AREAS OF APPLICATION

CONSUMER GOODS AND SERVICES
CONSTRUCTION
DEFENSE
EDUCATION

FIGURE EIGHT

REPRESENTING TECHNOLOGIES SIGNIFICANTLY AFFECTING
CALIFORNIA'S WORKFORCE IN THE 1980s

COMMUNICATION/INFORMATION

- OPTICAL DISKS
- BROADBAND COMMUNICATION
- COMPUTERS
- ELECTRONIC MEDIA

AUTOMATION

- SENSORS
- COMPUTER-AIDED DESIGN (CAD)
- INDUSTRIAL ROBOTS
- FACTORY AUTOMATION
- ARTIFICIAL INTELLIGENCE-
  EXPERT SYSTEMS

NEW MATERIALS

- METALLIC GLASSES
- HIGH-TEMPERATURE
  STRUCTURAL CERAMICS
- SOLID ELECTROLYTES

AGRICULTURE AND BIOLOGICAL ENGINEERING

- IRRADIATION
- TISSUE CULTURE/
  MICROPROPAGATION
- RECOMBINANT DNA

ENERGY

- HEAT PUMPS
- PHOTOVOLTAICS
- COGENERATION
- ENERGY MANAGEMENT AND
  CONTROL SYSTEMS

Specific projections for employment in technological fields is described in the next section on employment opportunities. Another issue to consider, though, is the fact that as important as technology is, its impact on professionals and managers is not yet universal. However, within the next 5-10 years, technology at some level will affect almost everyone.

In addition, the growth of high technology in California will not impact only "high technology" jobs. These industries, precisely because they are growth industries, will need personnel with expertise in the areas of administration, communication, sales, and finance. Still other occupations will have the nature of their assignments and tasks changed by technology. There is agreement that some technological training will be required of bookkeepers, clerks, secretaries, mechanics, and others. There is no agreement as to whether or not technology will increase the demand for only better trained persons, or will actually create jobs where less skill is required because of the automation. At least one author concludes there will be a need for more "smart and not-so-smart" employees.

TECHNOLOGY AND EDUCATION

There is irony in a situation where there is an increase in technically oriented industry and a pattern of reductions in state support for education. Education at all levels will need strong programs. A core of knowledge and skills, essential to any successful student, will enable the adult employee to use the new technology and to transfer their skills as necessary. Thus schools will need to update their subject matter, revising courses to reflect new technologies, while supporting a strong general education.

There may even be a paradox that as technology becomes more sophisticated, colleges may have to confine themselves to strong basic and general education, and introductions to specialized fields. Industries, in turn, will provide the latest on-the-job training. Here, too, though, community colleges are likely to be involved with on-site, contract, and in-service education. At the same time, some traditional fields will simply be affected by technology such as the technical writer or scientific illustrator.

Technology also will impact the delivery of education. Predicted is a dramatic increase in audio-visual learning laboratories, in computer-based interactive stations, in telecourses, and in courses offered at a variety of sites. The result is claimed to be a more responsive, individualistic environment with more time available for direct student-teacher contact.

Technology's overall impact on our lives will be so great that it is difficult to distinguish which societal changes are not due at least in part to technology. Even long-discussed goals such as encouraging lifelong learning, flexibility of offerings, and meeting student's needs, take on new and more intense meanings. Further implications for education are described in the following sections.

ENVIRONMENTAL ASSESSMENT

E. EMPLOYMENT OPPORTUNITIES AND EDUCATION

Shifting employment patterns is a reality most have come to accept. Predicting those for a specific geographic area is especially difficult. However, some generalizations appear so frequently, they are worth examining. Seventeen million new jobs are anticipated by the year 1990. California is projected to get more than its share of those and to expand by 2.7 million to 14 million in 1990.

About half of this growth will be related to high technology (see Table Seventeen). These include the often cited fields of computers, robotics, engineering technicians, and health-related technicians. On the other hand, many of the new jobs will be in the services, transportation, utilities, and financial areas. Government will have a slow growth and there will be a new demand for teachers as the "baby-boom" generation's children grow up.

TABLE SEVENTEEN

TEN MOST RAPIDLY GROWING JOBS, 1978-90

JOBS
DATA-PROCESSING MACHINE MECHANICS
PARALEGAL PERSONNEL
COMPUTER SYSTEMS ANALYSTS
COMPUTER OPERATORS
OFFICE MACHINE SERVICERS
COMPUTER PROGRAMMERS
AERO-ASTRONAUTICAL ENGINEERS
FOOD PREPARATION PERSONNEL (FAST FOODS)
EMPLOYMENT INTERVIEWERS
TAX PERPARERS

SOURCE: MAX CAREY, "OCCUPATIONAL EMPLOYMENT GROWTH THROUGH 1990", MONTHLY LABOR REVIEW, AUGUST 1981, P. 48.

In spite of technologies rapid growth, the greatest number of actual jobs will be in other fields (see Table Eighteen). Also of interest is the fact that some of these large number of openings are in fields supposedly requiring minimal formal preparation (see Table Nineteen). However, that assumption may be inaccurate and there may be new possibilities in those areas for post-secondary education.

TABLE EIGHTEEN

EMPLOYMENT AND EMPLOYMENT GROWTH IN THE FASTEST GROWING OCCUPATIONS: 1978-90

OCCUPATIONS	EMPLOYMENT (THOUSANDS)		EMPLOYMENT GROWTH 1978-90		
	1978	1990	PERCENTAGE INCREASE	(THOUSANDS)	(PERCENT OF ALL OCCUPATIONS)
FASTEST RELATIVE GROWTH[1]					
1. DATA PROCESSING MACHINE MECHANICS	63	156	148	93	0.4
2. PARALEGAL	28	66	132	38	0.2
3. COMPUTER SYSTEMS ANALYSTS	185	384	108	199	0.9
4. COMPUTER OPERATORS	169	317	88	148	0.7
5. OFFICE MACHINE AND CASH REGISTER SERVICERS	49	89	81	40	0.2
TOTAL	494	1012	105	518	2.4
FASTEST ABSOLUTE GROWTH[2]					
1. JANITORS AND SEXTONS	2585	3257	26	672	3.1
2. NURSES' AIDES AND ORDERLIES	1089	1683	55	594	2.7
3. SALES CLERKS	2771	3362	21	591	2.7
4. CASHIERS	1501	2046	36	545	2.5
5. WAITERS/WAITRESSES	1539	2071	35	532	2.4
TOTAL	9485	12419	31	2934	13.3
TOTAL, ALL OCCUPATIONS	97610	119590	23	21980	100.0

[1] BASED ON THE PERCENTAGE INCREASE IN THE NUMBER OF JOBS CREATED

[2] BASED ON THE NUMBER OF JOBS CREATED

SOURCE: BUREAU OF LABOR STATISTICS

TABLE NINETEEN

WHERE THE JOBS WILL BE -- 1980-90

FASTEST GROWING OCCUPATIONS REQUIRING A BACHELOR'S DEGREE

OCCUPATION	PERCENT INCREASE IN EMPLOYMENT	EMPLOYMENT 1980 (THOUSANDS)
COMPUTER SYSTEMS ANALYSTS	68-80	205
PHYSICAL THERAPISTS	51-59	34
COMPUTER PROGRAMMERS	49-60	228
SPEECH AND HEARING CLINIANS	47-50	35
AERO-ASTRONAUTIC ENGINEERS	43-52	68
ECONOMISTS	42-50	29
DIETITIANS	38-46	44
ELECTRICAL ENGINEERS	35-47	327
MEDICAL LABORATORY TECHNOLOGISTS	34-42	105
ARCHITECTS	33-41	80

FASTEST GROWING OCCUPATIONS THAT GENERALLY REQUIRE POST-SECONDARY EDUCATION AND TRAINING (BUT LESS THAN A BACHELOR'S DEGREE)

OCCUPATION	PERCENT INCREASE 1980-90	EMPLOYMENT 1980 (THOUSANDS)
PARALEGAL PERSONNEL	109-139	32
DATA PROCESSING MACHINE MECHANICS	93-112	83
COMPUTER OPERATORS	72-83	185
OFFICE MACHINE AND CASH REGISTER SERVICERS	60-73	55
TAX PREPARERS	49-70	31
EMPLOYMENT INTERVIEWERS	47-64	58

FASTEST GROWING OCCUPATIONS REQUIRING A HIGH SCHOOL DIPLOMA OR LESS

OCCUPATION	PERCENT INCREASE 1980-90	EMPLOYMENT 1980 (THOUSANDS)
FOOD PREPARATION AND SERVICE WORKERS, FAST FOOD RESTAURANTS	50-57	806,000
CORRECTION OFFICERS AND JAILERS	47-49	103,000
NURSES' AIDES AND ORDERLIES	43-53	1,175,000
PSYCHIATRIC AIDES	40-46	82,000
DENTAL ASSISTANTS	39-42	139,000
PAINTERS, AUTOMOTIVE	38-44	41,000

Thus, two themes emerge with regard to technology and employment. The growth rate for technological fields (especially engineers and technicians) is very high, especially when coupled with replacement needs. Community college graduates need to be on the competitive edge if they are to succeed.

On the other hand, all four of the fastest growing industries do not add up to great numbers. Furthermore, of the twenty occupations expected to generate the most jobs, not one is "high technology", only four require post-secondary training, and only two, nursing and teaching, require a Bacaulaureate degree. Such seemingly contradictory realities should serve to remind planners that a balanced perspective is more appropriate.

The characteristics of the worker will differ also between now and 1995. The work force will be older, with a dramatic drop in the number of 16-24 year olds. Women will be more likely to work and will gain 2/3 of the new jobs while minorities (women and men) will gain 1/4 of the new jobs. There will be increased support for creative personnel practices, including "flextime", shared jobs, shorter hours, work-site child care and equitable paternity leave policies.

Many workers will find it necessary to retrain in order to stay employed. Over the next 50 years, scores of new occupations will be created, causing the average worker to make a significant career change every ten years or so. Training and retraining will become a lifelong process. The need for retraining already is critical for the hundreds of thousands who have lost jobs in the past four years. Older workers have been hurt the worst and are in need of immediate attention. Their situation may be viewed as the beginning of a new and significant trend that will require a new approach to unemployment.

STANISLAUS COUNTY

Employment in Stanislaus County, as noted in the discussion of the local economy, has not been good in the recent past. In the past one to two years, the decline has been due primarily to cutbacks in government and education, followed by utilities and transportation. Very recently, gains have been made in construction, agriculture, and food manufacturing. An overall pattern for the Modesto SMSA (Stanislaus County) industry profile indicates minimal growth (see Tables Twenty and Twenty-One).

Specifically, in the next four years, employment opportunities will grow in construction, in food processing (offset by the closing of some canning facilities), manufacture of durable goods, and transportation. The greatest number of new job opportunities will be in the trade industry group, retail and wholesale. Of these, eating and drinking places are the single largest group. Others include department stores, grocery stores, furniture and appliance stores, wholesale and trade businesses. Financial institutions, and eventually, even real estate, is predicted to have positive growth. As is true of the other counties, the service division is the largest. The largest number of new jobs will be in medical and other health, repair, and miscellaneous business services. Employment in educational services is predicted to improve beginning in 1985, while opportunities in public administration will continue to decline. (see Table Twenty-Two).

TABLE TWENTY

EMPLOYMENT AND GROWTH RATES BY MAJOR OCCUPATIONAL GROUP 1980 and 1985

MODESTO SMSA

MAJOR OCCUPATIONAL GROUP	Number of Employed Individuals[1]		Change In Employment	Average Annual Growth Rate
	Projected 1980	Projected 1985	1980-1985	1980-1985
TOTAL, ALL OCCUPATIONS[2]	119,000	136,000	17,000	2.9
Professional, Technical, Kindred	14,500	16,200	1,700	2.3
Managers, Officials, Proprietors	11,700	14,100	2,400	4.1
Sales Workers	8,500	10,300	1,800	4.2
Clerical Workers	16,500	19,400	2,900	3.5
Crafts and Kindred Workers	17,700	21,000	3,300	3.7
Operatives	17,600	20,200	2,600	3.0
Service Workers	16,000	18,000	2,000	2.5
Laborers, Except Farm	4,700	5,500	800	3.4
Farmers and Farm Workers	11,700	11,300	-400	-0.7

[1]Occupational group totals have been rounded to the nearest 100.

[2]Individual line-items may not add to totals due to rounding.

TABLE TWENTY-ONE
STANISLAUS COUNTY EMPLOYMENT PROJECTIONS BY INDUSTRY
1976-1990

Industry	Number of Employed Individuals				Annual Average Growth Rate	
	1976	1980	1985	1990*	1976-80	1980-90
Total Civilian Workers	101,300	119,000	136,000	156,100	4.1	2.7
Agriculture, Forestry, Fisheries	14,300	15,500	16,000	16,500	2.0	0.6
Manufacturing	19,300	21,200	23,900	27,100	2.5	2.4
Durable Goods	4,100	5,700	7,200	9,100	8.6	4.8
Non Durable Goods	15,100	15,500	16,700	18,000	0.7	1.5
Food and Kindred	12,400	12,900	13,800	14,800	1.0	1.4
Other	2,700	2,600	2,900	3,200	-0.9	2.2
Non-Agriculture/Manufacturing	67,900	82,300	96,200	112,500	4.9	3.2
Mining	100	100	100	100	0.0	0.0
Construction	6,500	8,900	10,700	12,900	8.2	3.8
Transportation-Communications-and Utilities	4,500	5,200	6,100	7,100	3.7	3.2
Wholesale Trade	3,400	4,100	4,900	5,800	4.8	3.6
Retail Trade	17,600	22,500	27,400	33,300	6.3	4.0
Finance-Insurance-Real Estate	2,900	4,200	5,000	5,900	9.7	3.5
Services	28,700	31,900	36,700	42,100	2.7	2.8
Public Administration	4,200	5,300	5,300	5,300	6.0	0.0

Source: California Department of Employment Development (EDD), Projections of Employment 1980-85 Modesto SMSA, December 1980.

*1990 projections based on the assumption that EDD 1980-85 growth rates will continue to 1990.

EDUCATION FOR EMPLOYMENT

Even when unemployment is rampant, there are many jobs that go unfilled. This is in part due to the fact that people do not have access to appropriate training programs. Some authors contend that community colleges must find better ways to relate educational programs to occupational needs, causing education to become clearly career related. Even these authors, though, caution that vocational education programs should reduce the specific content taught to generic skills that can serve as long-term basic training. This approach requires up-to-date planning, assessment of programs, and close collaboration with the community.

Other authors, including Secretary of Education Bell, caution that colleges should not become "pragmatic, glorified, work-preparation institutes". Bell fears that early specialization will occur at the expense of the arts and humanities. He urges colleges to insist on a solid liberal-arts background.

Although liberal arts graduates have been hired in decreasing numbers since 1955, recent findings indicate a change in that pattern. Studies now indicate that business employers seek employees with skills in public speaking and debating, using good grammar and editing, analyzing and interpreting materials and data, using research and reference materials, and learning of new information. Liberal Arts graduates have been found to excel in these areas as well as in interpersonal skills, motivation, and administrative skills. While job offers to these graduates are still not as high as to those in technical fields, they are increasing. Liberal arts graduates are being hired to run computers, handle employee relations, and train for management jobs, often receiving training on-the-job.

What appears to be two opposing views need not be so. Industry leaders consistently state that they are looking for people with good basic skills (especially on problem-solving and communications), good work habits, a positive attitude and generic skills only related to a specific vocation. (see Table Twenty-Three). Many corporations prefer to do their own specific training. This in no way relieves the community college of the responsibility to be responsive to the community and to the changes in society. It does mean, though, that the goal of producing well-rounded, liberally educated students is still valid. In fact, many would argue that a "balanced" approach to education and training has become even more necessary in a time of great social change. A major study at Stanford University entitled "The Educational Implications of High Technology" addressed this issue and concluded as follows:

> "Since we cannot predict in any precise sense what characteristics of jobs will be over a forty-year working life, it is best to provide students with a strong general education and an ability to adapt to a changing working environment. Such adaptation requires a sufficient store of information about culture, language, society and technology as well as the ability to apply that information and acquire new information."

TABLE TWENTY-TWO

SELECTED OCCUPATIONS WITH SUBSTANTIAL JOB OPPORTUNITIES

1980—1985 -- MODESTO SMSA

These occupations are expected to have the greatest number of job opportunities within their respective occupational categories between 1980 and 1985. Because this table reflects only the demand for these occupations, training programs and career decisions should be developed only after the supply situation is considered. For example, there may be many job opportunities in one of these occupations, but an even larger number of persons applying for these jobs.

Job opportunities result from industry change and replacement of workers who leave the labor force for extended periods. The column "Average Annual Job Opportunities" represents job opportunities resulting from new jobs and replacement needs. The column "Percent Due To Replacement" represents the percent of the "Total Job Opportunities 1980 - 1985" that are due to labor force separations only.

Occupations With Substantial Job Opportunities[1]	Employment 1980	Total Job Opportunities 1980 - 1985	Average Annual Job Opportunities	Percent Due To Replacement
PROFESSIONAL, TECHNICAL, KINDRED				
Registered Nurses	1,499	554	111	55.2
MANAGERS, OFFICIALS, PROPRIETORS				
Other Managers, Administrators[1]	7,121	2,986	597	46.8
SALES WORKERS				
Sales Workers, nec[1]	6,728	2,790	558	48.2
Real Estate Agents, Brokers	1,071	653	131	60.6
CLERICAL WORKERS				
Secretaries, Other	3,778	1,538	308	48.0
Bookkeepers, Acct Clerks	3,329	1,180	236	58.1
Cashiers	1,428	618	124	40.0
CRAFTS AND KINDRED WORKERS				
Blue Collar Workers, Supervisors, nec	2,818	811	162	45.0
Carpenters	2,188	660	132	49.2
Heavy Equip Mech, Inc Diesel	1,722	509	102	45.2
OPERATIVES				
Truck Drivers	2,564	565	113	41.1
SERVICE WORKERS				
Cooks, except private	2,190	880	176	45.0
Waiters, Waitresses	2,056	663	133	49.2
Janitors and Sextons	2,203	641	128	80.7
FARMERS AND FARM WORKERS				
Farm Laborers, Wage Workers	7,514	845	169	100.0[2]
Farmers (Owners and Tenants)	2,540	837	167	100.0[2]

[1] "Other Managers, Administrators" and "Sales Workers, nec" are summary categories representing a large number of distinct occupations, few of which are particularly large on their own.

[2] A percentage of 100.0 indicates that 1985 employment in that occupation will be the same as, or less than, 1980 employment. As a result, all openings will be due to the need to replace workers.

TABLE TWENTY-THREE

JOB SKILLS FOR 1990

1. EVALUATION AND ANALYSIS
2. CRITICAL THINKING
3. PROBLEM SOLVING (INCLUDING MATH)
4. ORGANIZATION AND REFERENCE
5. SYNTHESIS
6. APPLICATION TO NEW AREAS
7. CREATIVITY
8. DECISION MAKING WITH INCOMPLETE INFORMATION
9. COMMUNICATION SKILLS IN MANY MODES

SOURCE: INFORMATION SOCIETY, DENVER, 1982

ENVIRONMENTAL ASSESSMENT

F. POST-SECONDARY TRENDS

The changes occurring in society are clearly dramatic in the areas of lifestyles and values, technology, economics and employment, and demographics. Educational systems, too, are in a state of change and will need to continue to be so if they are to survive (see Figure Nine). Exploring the trends in post-secondary institutions will enable community colleges to determine more accurately their viable alternatives.

Community colleges have enjoyed a period of rapid growth in the past two to three decades. The next two will be different due to demographic and economic changes, and perhaps due to a shift in the center of governance. In 1983-84, the percent of traditional college-age students already began decreasing nationally. Overall national figures appear stable, however, primarily because attendance at community colleges was least affected. California community colleges' decline of 8% is undoubtedly due to the ambiguity prevalent in many districts and in most people's minds regarding fees, cuts, and course offerings.

For all segments of higher education, then, recruitement and competition will become key concerns. Since the number of traditional age college students will decline, institutions will attempt to attract older, part-time and minority students. Thus, the community colleges will find themselves in competition with institutions previously not interested in this student market.

While the number of young adults in vocational education is predicted to decrease, older adults are likely to seek re-training and upgrading of job skills. Cooperation and collaboration between schools and business and industry will be imperative, and may be mandated by law. Accountability in general, and especially for vocational education, will assume great importance, with state and federal funds contingent upon it.

Technology will affect higher education both in curriculum content and mode of delivery. The "information explosion" will require that technology be used to store and to present the abundance of facts. At the same time, students, and prospective employees, will need to be able to analyze and use data. Similarly, there will be increased demand for the generalist (as opposed to the specialist who more quickly becomes obsolete) who can adapt to four or more job changes during their working careers. Proficiency in reading, writing, math, science and thinking, in addition to specific course content, will enable adults to benefit from new technology by acquiring the "old" skill of "learning how to learn". Even liberal arts students will benefit from this increased demand, particularly in the service area but also in industry, for personnel with outstanding communication abilities.

Another unknown in the future of post-secondary education is the precise role of "adult education". Currently available through adult education centers affiliated with high schools and through community colleges, adult education may find its functions distributed, rather than repeated, in the near future.

Enrollment in adult education has quadrupled in the last eight years. Some leaders in the field predict that vocational education will be withdrawn from adult education and be exclusively the domain of the community colleges. At the same time, this could lead to a decrease in the colleges' offering of basic education which would become the perogative of adult education centers. Still another possibility is that all adult education would be consolidated into the community college system. While the outcome of this dilemma is not yet clear, it is the consensus of many that a resolution will be forthcoming soon. In either case, there would, of course, be an impact on the community college.

In the Stanislaus County area, only two public institutions of higher education exist (MJC and Cal State Stanislaus). While MJC has easily been the predominant provider of post-secondary education in this area due to its programs, history, and reputation, that may not continue to be the case. There are a number of private institutions (27 in the fall of 1983) which already are responding to community demand. In addition, there are number of other public education institutions within a short driving distance, and numerous extension offerings from colleges headquartered a great distance away. The community college will, and in fact already is, competing with these other suppliers of learning. The ability to change, be flexible, and be responsive will be absolutely essential if Modesto Junior College is to continue its leadership role.

FIGURE NINE
EDUCATION IN THE YEAR 2000

From old emphasis on	To new emphasis on
closed systems	open systems
traditionally credentialed personnel	noncredentialed personnel and those having multiple credentials
inefficient information transfer	educational technology
authoritarianism	humanism
arbitrary curriculums	life itself and student interests
input measurement	output measurement
white working and middle-class orientation	cultural pluralism
mass education	individual education
the needs of the economy	the needs of the individual and society
lock step	primacy of individual differences
rote learning	discover
K-12 (kindergarten through 12th grade	early childhood development and adult continuing education
"cells and bells" learning	home learning, independent study learning when you feel like it
poor instructional art	scientific basis of instruction
passive learners	active learners, student-initiated learning
prohibition of use of peer resources	maximum utilization of peer resources, especially cross-peer teaching
external rewards	internal rewards
"student as nigger"	highly valued individual
purely cognitive	balance between cognitive, affective, and conative
conforming behavior	divergent behavior
discipline	academic excellence
fragmentation of knowledge	unity and synthesis of knowledge
grades	continuous progress
arbitrary grouping	grouping based on educational mission
competition	cooperation
memorization/regurgitation	learning to learn
suspicion	trust
punitiveness	encouragement
rewards for only academic learning	value of extra-academic learning
compentency based on attendance/ course completion	student-initiaged "challenge" exams
school/state requirements	self-actualization
limiting of potential	expanded consciousness

From old emphasis on	To new emphasis on
teacher autonomy	learner autonomy
student dependency on teacher stimulus	chemical/electrical enhancement of learning receptivity
limited curriculum	vastly expanded curriculum
book learning	meditation, sentics, biofeedback
classroom learning	monastic learning, environmental learning

ENVIRONMENTAL ASSESSMENT

G. PUBLIC POLICY

The history of California Community Colleges has been one of growth, diversity, and responsiveness to local communities. The colleges have been largely successful as long as there were funds to support the many facets of their programs. The decrease in available funding in recent years, and apparently in the near future, has created an environment of closer scrutiny than has ever been the case.

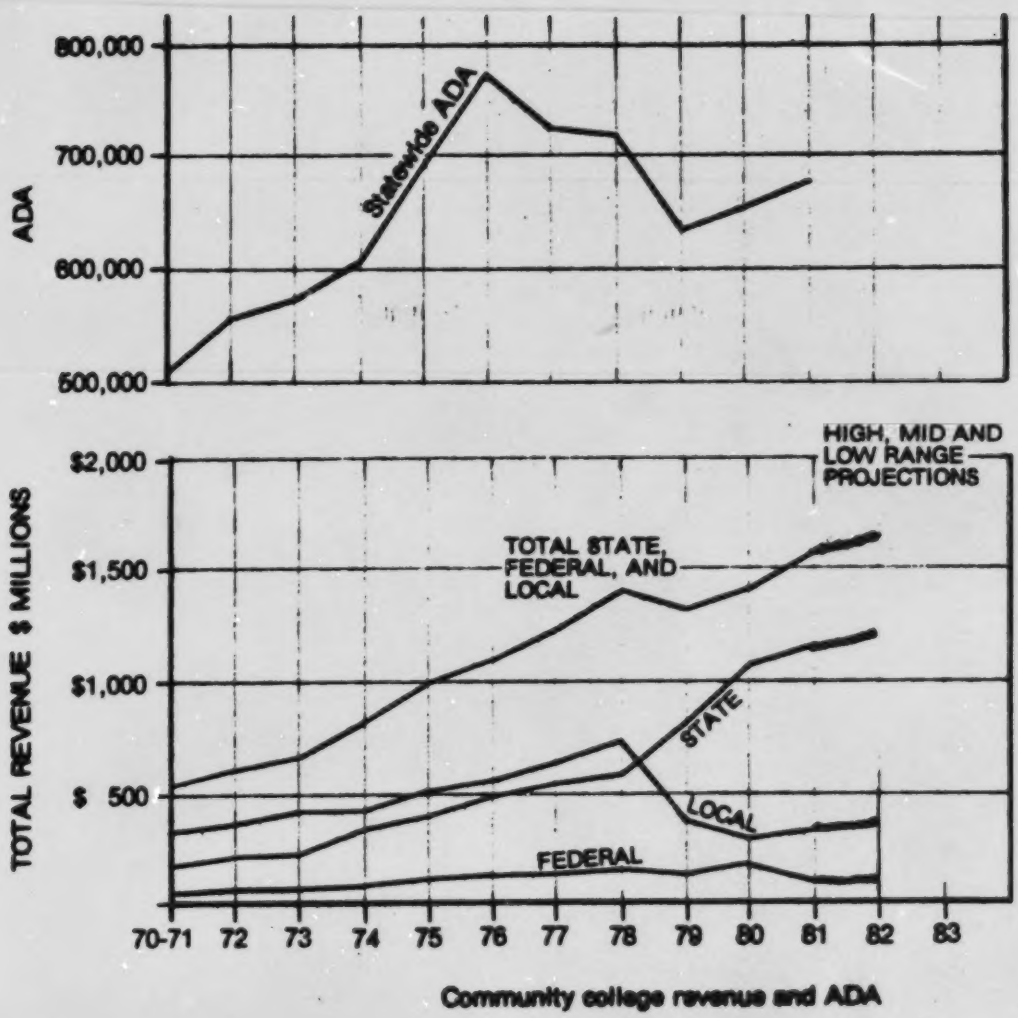
While the recent legislative impasse with respect to California Community College finance vividly demonstrated the impact of state decisions on local programs, the trend toward increasing state influence already was well established. The future undoubtedly will bring local, state, and national reviews of community colleges, their strengths and their weaknesses. These outside influences will determine what it is they believe should be done, how well it is being done, and, based on that, how much of the available resources will be allocated to community colleges.

Finance will remain a critical issue for some time unless a stable source of funding is identified. Since community colleges have had no choice but to become dependent upon the state for revenues since the passage of Propostion 13 (see Figure Ten), this stability will require a statewide resolution. In the meantime, colleges will explore other sources of revenue such as federal categorical monies, Job Training Partnership Act funds, grants, foundation fund-raising, and contract education.

The dilemma over financing often is traced to tension as to the purposes and functions of the community college. These tensions are likely to continue until there is considerable consensus with regard to the mission of these colleges. Whether a comprehensive college will remain viable, or programs should focus on general education or vocational training, or the college should become a community based learning center, are issues that no longer can be ignored. The role of the community colleges, and various perceptions about their mission are explored further in Section IV.

Closely related to mission and funding issues is the quest for determining who it is community colleges should and/or do serve. Most recently this concern has focused on the appropriateness of tuition. While some argue that tuition seriously restricts access to the community colleges, others contend that "serious" students will and should pay a moderate tuition. The majority of community college leadership has resigned itself to tuition or fees of some sort as a matter of survival. What is most clear is that it will not be community college personnel who decide this issue.

FIGURE TEN



This involvement of non-educators in significant educational decisions is another trend that will prevail. Existing and pending legislation portends an increasing role for business and industry in Vocational programs. Advisory committees, foundations, boards, and direct links with the community will be the rule, rather than the exception.

Other kinds of governmental regulations will present constraints in which colleges must operate. Legal implication for planning, development, and taxation are examples. College leaders not only will need to stay informed of these but also to attempt to influence them when appropriate. Activism may become a significant part of the job description for these leaders.

III. MISSION AND GOALS

The mission and goals of California Community Colleges is such a pervasive issue that it is not exclusively an external or internal issue. Community college personnel continue to discuss, debate, and implement decisions based on their interpretation of the appropriate role for a community college in their service area. While the public and politicians always have had some interest in what occurred in these institutions, that interest reached a new high in the recent past for a variety of reasons, some of which were discussed in Section 2G, Public Policy. Since several of these reasons are related to the working definition of mission and goals, these issues will be explored in this separate section even though they are an aspect of public policy.

Following an overview of the statewide view of mission and goals, the results of research in Stanislaus County will be presented. Two populations, "community leaders," and Modesto Junior College faculty, were surveyed to determine their views of the functions and performance of MJC, as well as factors to consider in developing or reviewing program priorities and community involvement in college activities.

MISSION AND GOALS

A. STATEWIDE ISSUES

Whether it is due to the increased state role in funding Community Colleges, declining resources in general, a more knowledgeable and aware public citizenry, a combination of the above, or some other factors, the result is that the role and performance of California community colleges is being more closely scrutinized than ever before. This scrutiny appears to be affecting funding and governance decisions, as well as specific programs.

While a few community colleges have been in existence for more than 70 years, the major expansion occurred in the last two decades. The colleges' functions have expanded to include transfer education, vocational and technical education, remedial education, and community service activities. Community responsiveness has been a guideline and, more than in other segments of higher education, opportunities for personal growth have developed.

The very diversity of 106 community colleges, considered to be a strength by most community college personnel (from students through trustees) has contributed to widespread confusion among the public and political leaders as to what the real purpose of community colleges is. The call for a clarified statement of mission and goals has come in the last two months alone, from the Governor and his aides, legislative leaders, the Chairperson of the California Post-Secondary Education Commission, and editors of statewide newspapers. Community college leaders, however, already had begun discussing this issue, at least partially in response to a draft statement of Mission and Goals prepared by the California Community College Board of Governors in the fall of 1982. Still under consideration by that body, a number of community college organizations have begun, or completed, major efforts to present positions justifying continuance of the "comprehensive" community college, and maintaining an "open door" while being accountable to a local constituency.

Nevertheless, numerous authors have stated that community colleges will have to cease even attempting "to be all things to all people." While that, of course, was never the case anyway, it is true that this statement represents a different perspective than has been prevalent. Questions under consideration include whether or not community colleges should offer English as a Second Language (recently reaffirmed as a major priority by the Board of Governors), Adult Education to non-high school graduates, and remedial education to those significantly below college level performance.

Who the system should serve is a theme within the issues of the assessment of fees and tuition, the provision of training for local versus regional students, and the view of the community college as a two-year or lifelong institution. The resolution of these dilemmas may well be affected by perceptions about community colleges' strengths in performance and by the growing "turf" battle between the community colleges, the state universities, and the University of California. This resolution, and others, will affect dramatically the nature of community colleges for the foreseeable future.

Public sentiment with respect to some of these issues was studied in the summer of 1983 by Larry Eastland and Associates. This statewide survey of 1,500 registered voters, representative of all Californians, indicated support for both increased funding for community colleges and increased local control. Half of those surveyed indicated that they had attended a community college at some time and 85% indicated they will enroll as a part-time student when they next attend a class at a community college.

This study also found that the fundamental components of the existing mission of California Community Colleges is strongly supported by this sampling. As indicated in Table Twenty-Four the support for these seven components ranged from approximately 80% approval to more than 50%. The components receiving the strongest support are those which are more directly related to the attainment of specific learning goals and improving the likelihood of gaining employment.

TABLE 24

STATEWIDE VIEW OF COMMUNITY COLLEGE MISSION

Component	Percent of Sample Considering Component as Appropriate
1. Job/Career Education	79.6%
2. Basic Skills	74.7%
3. Transfer Education	72.9%
4. General Education	70.5%
5. Student Support Services	68.1%
6. Life-long Learning	66.2%
7. Cultural/Recreational/ Special Interest	51.5%

The successful performance of California Community Colleges, as viewed by this sampling is reported in Table Twenty-Five. In general, the ranking of appropriate functions is comparable to the ranking of fuctions that are performed successfully. There is one major exception to this generalization, however. That is the area of "basic skills" which is considered the second highest priority, but only the sixth most successful.

Almost 80% of the respondents rated the overall quality of education at California Community Colleges as excellent to average, with the highest rating coming from those who have attended a community college and are over the age of 24 years. This age discrepancy also is apparent when adults are asked their major reason for attending community colleges. The 18-24 year olds cite preparation for college transfer most often while 25-34 year olds most frequent response is for vocational skills. The 35-49 year olds continue to mention vocational opportunities but list personal enrichment equally often. Those prospective and past students over 50 years list personal enrichment as their primary motivation for attending community colleges. Thus, as demographics continue to change, the mission of community colleges may vary based simply on student demand.

It is not certain how or how soon the concerns related to mission and goals will be resolved. What is certain is that there will be considerable debate, the results of which will have profound effects. Consequently, community college representatives will need to be well-informed in order to influence those decisions. One aspect of that information can be provided by assessing the beliefs and priorities of members of the constituency served and the college faculty directly involved.

TABLE 25

STATEWIDE VIEW OF PERFORMANCE OF COMMUNITY COLLEGE IN MISSION COMPONENTS

Component	Percent of Sample Evaluating Performance as Excellent or Good
1. Job/Career Education	81%
2. Transfer Education	55%
3. Lifelong Learning	54%
4. Cultural/Recreational/ Special Interests	50%
5. General Educational	47%
6. Basic Skills	44%

MISSION AND GOALS

B. SURVEY OF COMMUNITY LEADERS

When planning for the future, community college representatives must consider a number of variables including internal program evaluation, external demands and needs, projections for the future, and public support for programs, policies, and procedures. One recommendation of planning experts is to assess the views, and take advantage of the expertise, of leaders in particular service areas in order to determine their view of what the future will bring to their community and how the community college should prepare for that.

Such a survey of community leaders within Stanislaus County was conducted by the Office of Instruction, Modesto Junior College, between December 15, 1983 and January 15, 1984. The leaders who were requested to participate were selected by tabulation of recommendations from the Leadership Modesto Program Committee (comprised of members from business, industry, human services, and education), the Modesto Junior College Needs Assessment Task Force and members of the Modesto Junior College faculty. The identified group was meant to represent some of Stanislaus Counties most visible, vocal, and influential leaders. The intention was to identify their view of Stanislaus County's future and their perceptions of how Modesto Junior College should best respond to this view of the future. Also included in this study were questions related to mission and goals, and selected college policies.

Of the 175 leaders contacted, 145 responded, constituting a 75% return rate. Almost 70% of these people have lived in Stanislaus County for more than 15 years and another 15% for 6-15 years. A very well-educated group, 40% had earned a Bachelor's Degree, while another 38% had earned graduate degrees as well. An additional 23% had completed some college. Approximately 40% are affiliated with business or industry, 24% with other professional occupations, 18% in government, and 18% in education. More than half represent organizations of more thn 100 persons, while a third are from organizations of less than 25 persons.

In order to understand better the basis of this groups' responses to questions related to MJC in particular, respondents were asked what their association with MJC in the past had been. As Table Twenty-Six reveals, the community leaders of Stanislaus County are very familiar with MJC and often through direct personal expriences. Respondents also were asked their sources of current information about MJC. Not surprisingly, the most often cited sources were newspapers and friends. The next most frequent response was "direct mail" (see Table Twenty-Seven). While it is not possible to determine the quality of the contact or the accuracy of their sources, it is reasonable to conclude that most respondents consider themselves fairly familiar with MJC.

TABLE 26

COMMUNITY LEADERS' ASSOCIATION WITH MJC

	Activity	% of Sample Selecting
1.	Know staff member	87.5%
2.	Have attended MJC	63.2%
3.	Family member has attended MJC	50.0%
4.	Have attended non-class activities	47.8%
5.	Member of MJC Advisory Committee	20.6%
6.	Know MJC by reputation only	4.4%
7.	No association	2.2%

TABLE 27

CURRENT SOURCE OF INFORMATION ABOUT MJC

	Source	% of Sample Selecting
1.	Newspapers	77.8%
2.	Friends	67.4%
3.	Direct Mail	47. %
4.	Radio	8.1%
5.	Television	6.7%

In a technique similar to that used in the previously cited Eastland study, the participants were asked which functions of a community college they considered appropriate and how well they believed MJC had successfully achieved these functions. Table Twenty-Eight clearly demonstrates support for the comprehensive mission with little difference between the priorities of general, transfer, and vocational education. Even the other four functions receive support from a comfortable majority.

TABLE 28

APPROPRIATE FUNCTIONS FOR MJC BY COMMUNITY LEADERS

Function	% of Sample Considering function appropriate
1. General Education	96.3%
*2. Job/Career Education	93.4%
*2. Transfer Education	93.4%
4. Lifelong Learning	77.9%
5. Basic Skills	73.5%
6. Student Support Services	69.6%
7. Cultural/Recreational/Special Interests	63.0%

*These two functions were tied for second place in the rank ordering.

Although attempting to rank appropriate functions is admittedly difficult, the participants were asked to do that. The ambiguity of their responses is evident when considering the data several ways. Table Twenty-Nine demonstrates the slight ranking differences due to ranks according to function's receipt of a #1 priority, a combination of #1 and #2 ranks, or median responses. The end result, however, is still the fact that general, vocational, and transfer education are considered to be the most appropriate functions for the community college by these respondents.

MJC's success in providing these opportunities, as defined by this group, is illustratd in Table Thirty. The rate of success, as compared to the priority of function is approximately the same except for the functions of "basic skills" and "job/career education". More respondents consider these two functions to be of importance than consider MJC to be successful at providing these services.

TABLE 29

RANK ORDER OF FUNCTION PRIORITIES BY COMMUNITY LEADERS

Function	Median	% of Sample Selecting Priority #1	% of Sample Selecting Priority #1 or #2
General Education	1.0	54.1%	75.2%
Job/Career Education	2.0	20.9%	64.2%
Transfer Education	2.0	22.0%	48.8%
Basic Skills	3.0	3.1%	7.8%
Student Support Services	4.0	0%	2.3%
Lifelong Learning	4.0	.8%	2.3%
Cultural/Recreational/ Special Interests	5.0	.8%	.8%

TABLE 30

MJC'S SUCCESS IN MISSION FUNCTIONS BY COMMUNITY LEADERS

Function	% of Sample Selecting Very Successful or Successful
General Education	89.3%
Transfer Education	82.3%
Lifelong Learning	79.3%
Job/Career Education	70.3%
Cultural/Recreational/Special Interests	62.0%
Student Support Services	39.0%
Basic Skills	38.0%

Several questions relate to what kind of students MJC should serve. These are summarized in Table Thirty-One which indicates that support ranges from 50-65% for prioritizing programs designed for local residents, for English as a Second Language and for adult education. There is an indication that remedial education is appropriate but access to college credit classes should be limited on the basis of academic skills.

TABLE 31

APPROPRIATE STUDENT POPULATION BY COMMUNITY LEADERS

% of Sample in Agreement	
65.5%	MJC should limit enrollment in college credit classes to persons with skills above the eighth grade level.
65.1%	MJC should give higher priority to programs designed for local residents.
62.7%	MJC should offer remedial courses designed to prepare students for college level work.
58.9%	Enrollment in college credit classes should be limited on the basis of general academic skills.
53.7%	MJC should be responsible for teaching English as a Second Language to those adults who need it.
50.0%	MJC should offer classes in "adult education" (elementary and high school level work).

Issues related to finance, funding, and costs of programs were addressed in several ways (see Table Thirty-Two). Community leaders expressed support for adequate financing in order to maintain a quality program. Sources of revenue considered appropriate included state funding, tuition, and industry support. There was less support for the idea of general fund-raising.

TABLE 32

COMMUNITY COLLEGE FINANCE ISSUES BY COMMUNITY LEADERS

% of Sample in Agreement	
87%	Maintaining a quality program requires competitive expenditures in the area of staff, equipment, and supplies.
70%	A quality educational program requires staff salaries that are competitive with those available in the private sector.
70%	Community and junior colleges should charge a moderate tuition in addition to existing fees.
74%	Business and industry in the community have a responsibility for the financial support of vocational programs related to their special interests.
46%	The community-at-large should be urged to contribute to the college through major fund-raising efforts.
68%	State funding for individual instructional programs should be based on the costs of offering those programs.
37%	Community and junior colleges should be financed primarily by local sources of revenue.
82%	Community and junior colleges should be controlled primarily by local authorities.

Decisions related to program also are affected by finance, but include general policies as well. Guidelines preferred by community leaders are illustrated in Table Thirty-Three. Major support exists for the consideration of demand, career opportunities, and cost when making program decisions. There also appears to be support for the need to maintain quality, and even some expensive programs, even if it means cutbacks in other areas. Two concluding questions perhaps summarize the position of these community members. Fully 84% agreed with both statements that MJC should continue to be a comprehensive college and that, due to financial constraints, this may be less and less possible.

TABLE 33

PROGRAM DECISIONS AND POLICIES BY COMMUNITY LEADERS

% of Sample in Agreement	When making a decision about whether or not to continue or to develop an instructional program, the following factors are important:
98%	Demonstrated demand
85%	Career opportunities
80%	Cost of program
54%	Consequent reductions in other programs
38%	MJC should consider reducing or eliminating programs when the costs incurred exceed the revenues generated.
77%	Emphasis should be placed on protecting and improving the quality of programs retained even if it means reducing the number of offerings.
80%	MJC should offer on-site, user-fee supported programs to businesses, industries, offices, etc.
45%	MJC should offer academic programs that compete with those available through private, for-profit business organizations.
84%	It is important that MJC continue to be a comprehensive community college fulfilling many purposes and needs.
84%	In a time of financial constraint, the college may no longer be able to be "all things to all people."

MISSION AND GOALS
C. SURVEY OF MJC FACULTY

The faculty of any institution are, by definition, more closely involved with its instructional program than any other group of people. Collectively they possess experience and expertise about what is happening in their classrooms. Precisely because faculty are central to any program, their attitudes and beliefs about mission and goals, finance, and program decision-making is especially critical to any on-going planning.

Consequently, the instructional and support service faculty of Modesto Junior College were surveyed during the week of January 4-11, 1984 to determine their responses to the issues also addressed by community leaders. Of the 228 faculty contacted, 207 responded, representing a return rate of 91%. No attempt was made to identify the respondents by division or any other category.

The functions of a community college considered appropriate by this group are identified in Tables Thirty-Four and Thirty-Five. The faculty obviously supports a comprehensive mission for the college. Even when forced to rank priorities (which a few refused to do and even more complained about doing), there is still a consensus that general education is our highest priority, with transfer and career education tied and not far behind.

The faculty's perception of how successful the institution has been is displayed in Table Thirty-Six. Essentially, faculty believe they are most successful in the areas of their highest priority. The exception noted is that basic skills and student support services rank lower on the performance scale, than on the priorities. Thus, these two areas need to be examined to determine what support they need in order to improve performance.

The questions previously discussed that relate to which students should be served are presented in Table Thirty-Seven. MJC faculty indicate a similar degree of support for the ideas of prioritizing local needs (65%), providing English as a Second Language (60%), and providing remedial education (66%). There was less support (51%) for adult education offered by MJC. Approximately 60% agreed that 8th grade level skills was a minimum for entry. A number of comments indicate that some believe 12th grade level skills should be required.

TABLE 34

APPROPRIATE FUNCTIONS FOR MJC BY MJC FACULTY

Function	% of Sample Considering Function Appropriate
1. Transfer Education	98.6%
2. General Education	97.6%
3. Job/Career Education	95.1%
4. Lifelong Learning	92.3%
5. Student Support Services	83.1%
6. Cultural/Recreational/ Special Interests	80.1%
7. Basic Skills	77.8%

TABLE 35

RANK ORDER OF FUNCTION PRIORITIES BY MJC FACULTY

Function	Median	% of Sample Selecting Priority #1	% of Sample Selecting Priority #1 or #2
General Education	1.0	53.8%	74.9%
Job/Career Education	2.0	27.3%	56.6%
Transfer Education	2.0	27.5%	54.0%
Basic Skills	3.0	4.6%	15.4%
Student Support Services	4.0	3.1%	9.2%
Lifelong Learning	4.0	4.0%	9.1%
Cultural/Recreational/ Special Interests	5.0	2.0%	4.0%

TABLE 36

MJC'S SUCCESS IN MISSION FUNCTIONS BY MJC FACULTY

Function	% of Sample Selecting Very Successful or Successful
General Education	94.2%
Transfer Education	89.3%
Job/Career Education	83.6%
Lifelong Learning	78.6%
Cultural/Recreational/Special Interests	60.5%
Basic Skills	60.2%
Student Support Services	54.3%

TABLE 37

APPROPRIATE STUDENT POPULATION BY MJC FACULTY

% of Sample in Agreement	
66.0%	MJC should limit enrollment in college credit classes to persons with skills above the eighth grade level.
65.4%	MJC should give higher priority to programs designed for local residents.
66.9%	MJC should offer remedial courses designed to prepare students for college level work.
59.5%	Enrollment in college credit classes should be limited on the basis of general academic skills.
60.3%	MJC should be responsible for teaching English as a Second Language to those adults who need it.
51.3%	MJC should offer classes in "adult education" (elementary and high school level work).

The financial picture for community colleges which has prevailed for some time, and most gloomily for the past nine months, undoubtedly contributed to the faculty's responses outlined in Table Thirty-Eight. The faculty believes that adequate funding is essential, but only half were willing to seek this through fund-raising or tuition. A little more than 60% support the concepts of differential funding, industrial support of vocational education, and preference for local control.

TABLE 38

COMMUNITY COLLEGE FINANCE ISSUES BY MJC FACULTY

% of Sample In Agreement	
88.4%	Maintaining a quality program requires competitive expenditures in the area of staff, equipment, and supplies.
91.9%	A quality educational program requires staff salaries that are competitive with those available in the private sector.
54.7%	Community and junior colleges should charge a moderate tuition in addition to existing fees.
61.1%	Business and industry in the community have a responsibility for the financial support of vocational programs related to their special interests.
46.2%	The community-at-large should be urged to contribute to the college through major fund-raising efforts.
61.0%	State funding for individual instructional programs should be based on the costs of offering those programs.
32.3%	Community and junior colleges should be financed primarily by local sources of revenue.
63.3%	Community and junior colleges should be controlled primarily by local authorities.

Factors affecting program review that are primarily related to finance are displayed in Table Thirty-Nine. Faculty place a high priority on student demand and related career opportunities. While some (54%) believe costs should be considered, there is strong resistance to reducing programs solely on that basis (only 17% agreed). At the same time, nearly 80% indicated it is more important to maintain quality than to maintain numbers. It is not surprising that nearly 90% of MJC faculty still believe that MJC should attempt to remain comprehensive despite all external or internal contingencies.

TABLE 39

PROGRAM DECISIONS AND POLICIES BY MJC FACULTY

% of Sample in Agreement	When making a decision about whether or not to continue or to develop an instructional program, the following factors are important:
95.5%	Demonstrated demand
82.8%	Career opportunities
54.8%	Cost of program
44.7%	Consequent reductions in other programs
17.6%	MJC should consider reducing or eliminating programs when the costs incurred exceed the revenues generated.
79.1%	Emphasis should be placed on protecting and improving the quality of programs retained even if it means reducing the number of offerings.
83.7%	MJC should offer on-site, user-fee supported programs to businesses, industries, offices, etc.
60.6%	MJC should offer academic programs that compete with those available through private, for-profit business organizations.
89.7%	It is important that MJC continue to be a comprehensive community college fulfilling many purposes and needs.

MISSION AND GOALS
D. CONCLUSIONS

Regardless of the group surveyed, the general population of California, the leaders of Stanislaus County, or the MJC faculty, there is still widespread support for a comprehensive community college offering general, transfer, and vocational education.

These three functions were perceived by the leaders and the faculty in a very similar fashion. The only function where faculty and leaders did differ somewhat was in the priority given to "basic skills" with the leaders, and the statewide community, ranking it higher than did MJC faculty (see Tables Twenty-Eight and Thirty-Four). MJC faculty and community leaders' ratings of MJC performance on various functions, when ranked, also were very similar. Faculty, however, did tend to rate MJC's performance on each of the functions higher than did the community (see Tables Thirty and Thirty-Six).

The populations which should be served by MJC also are similarly defined by community leaders and faculty. The extent of the agreement, in fact, is distinct (see Tables Thirty-One and Thirty-Seven). Only a slight difference exists in the support of ESL progorams with the faculty more favorably inclined (60% versus 53%).

In the area of financial issues there is both agreement and disagreement. Both groups support the practice of adequate expenditures, differential funding, and the use of state monies to support the schools. The community leaders are more willing to see a tuition charged (70% versus 55%), and more willing to seek financial support from the business community for vocational programs (74% versus 63%). At the same time, the faculty more strongly agree that a quality program requires staff salaries that are competitive with those available in the private sector (92% versus 70%).

Both groups also concur that the making of program decisions requires an extensive consideration of student demand and career opportunities. The community places more emphasis than faculty on the costs of program (80% versus 55%), but both are reluctant to cut programs just on that basis. Both groups also appear committed to maintaining a comprehensive college, but only without diminishing its quality.

The remarkable similarity between the perceptions of the faculty and community leaders, with only a few exceptions, is probably still another indicator of the college's reputation in the community. The fact that these priorities are consistent with the published statements on mission and goals, developed by the Board of Trustees and college personnel, is further evidence that even in the trying times of the past five years the college has remained responsive to the community. The policies adopted by the Board of Trustees, the procedures developed by administration, and the practices of faculty and staff have been responsible for this success. What is critical at this time is for trustees, administrators, faculty and staff to study what the future may hold and to begin planning accordingly so that the same degree of success may continue.

IV. SUMMARY OF ENVIRONMENTAL ASSESSMENT INFERENCES

The preceding description of major trends affecting people and their communities present influences for community colleges which need to be addressed. The following list refers to changes already cited. It is not meant to be inclusive. Rather, it is a starting point for discussion.

A. LIFESTYLE AND SOCIAL CHANGES

1. Significant changes occurring in the United States and in California affect the community colleges and necessitate change in the institution as well.

2. Adults will choose from a variety of alternative lifestyles, values and preferences.

3. Societal shifts will require adults to adapt and cope with change.

4. "High technology" will renew the demand for "high contact" with people.

5. There will be a greater emphasis on self-improvement and the arts.

B. DEMOGRAPHICS

1. The population of Stanislaus County will continue to grow, due primarily to immigration both from other counties and other states.

2. The minority population will increase dramatically until it becomes approximately half of the population.

3. The number of "college-age" students will decline while the number of persons between 25 and 50 will rise.

4. MJC's students will be older, will attend college for a somewhat different reason than their younger counterparts, and will be primarily part-time students.

5. The aging population will create new demands for education about aging and for the aged.

C. ECONOMICS

1. The state of the economy will affect the availability of both resources and students for the community college.

2. The economy will be less dependent upon "smokestack" industries and more on service and information businesses.

3. Stanislaus County's economic health may be better than is commonly assumed.

4. Agriculture will remain a predominant force statewide and locally, although the focus of employment will change.

5. Modesto's economic development will depend, at least in part, on the success of city and Chamber of Commerce economic development activities.

D. TECHNOLOGICAL TRENDS

1. Technology will affect many aspects of our lives, including work, home, and leisure.

2. Major technological industries will emerge in the fields of communication, energy, agriculture and biological engineering, and automation.

3. Many non-technical jobs will be affected by technological advances.

4. Students will need and seek technologically advanced training.

5. Survival in a technological era will require a strong general education.

6. Faculty will need to continually update their knowledge.

E. EMPLOYMENT OPPORTUNITIES AND EDUCATION

1. The movement from an industrial society to an information-based society will result in significant changes in some occupations and massive displacement of workers in others.

2. While high technology occupations have the highest growth rate for employment opportunities, the total number of jobs created is not high.

3. Employers will seek graduates who have strong basic skills, a positive attitude, and some introduction and hands-on experience.

4. Colleges will need to become more cognizant of the needs and opportunities within business.

5. Displaced workers will turn to community colleges for retraining opportunities.

6. Lifelong learning will become commonplace.

F. POSTSECONDARY TRENDS

1. Consumer-oriented students will choose from numerous post-secondary institutions the one best meeting their needs.

2. The three segments of public higher education in California will compete with each other for students, since the traditional age college population will shrink dramatically.

G. PUBLIC POLICY

1. The flexibility of community colleges has been severely curtailed by legislative mandates.

2. The funding of community colleges will continue to become a state, as opposed to local, responsibility and will be subject to political ramifications.

3. Governance will continue to be a controversial issue, with the state taking on increasing functions, while at the local level participatory, or shared governance, will predominate.

4. Community Colleges will be closely scrutinized with respect to their role, effectiveness, and viability.

5. As a part of the community, community colleges will be affected by local regulatory (planning, tax, growth) decisions.

H. MISSION AND GOALS

1. The public and elected officials in California have strong beliefs about the function of community colleges and will attempt to translate these beliefs into policy.

2. While the public approves of a comprehensive college, their priorities are in the areas of general education, career development, and transfer programs.

3. The leaders in Stanislaus County and the faculty of MJC tend to support a comprehensive view of mission and goals, but differ somewhat on priorities and evaluation of MJC's performance.

4. Limited resources will necessitate that some priorities of programs and services be established.

V. SOME IMPLICATIONS FOR THE FUTURE

The value of research which describes issues and trends, and leads to inferences, is tested ultimately by the implications for action which are drawn from those findings. Community college staff and trustees must be the ones to decide what actions will be taken as a response to particular conclusions. It is staff, too, who must decide how to implement any plan that is considered worthwhile. The implications and plans which could be considered are numerous. No attempt is made here to be inclusive. Rather, some possibilities are presented with the objective of creating a discussion of these and others.

IN ORDER TO BE A VIABLE PART OF ITS GEOGRAPHICAL AND EDUCATIONAL COMMUNITY, THE COLLEGE, AS AN INSTITUTION, WILL:

1. Conduct and participate in on-going research and development.
2. Assist staff in recognizing the changes occurring in society and in the community.
3. Maintain its diversity, comprehensiveness, and responsiveness to the community.
4. Involve trustees, college personnel and community members in a shared governance approach to decision-making.
5. Support the intent of the "open door" policy, while choosing priorities due to restricted resources.
6. Aggressively seek new students, targeting older and minority members of the community.
7. Implement processes which facilitate change and flexibility (such as program review and curriculum development).
8. Seriously consider alternatives to current programs and practices.
9. Network with other colleges and data sources to provide better information and services at less cost.

CHANGES IN THE COMMUNITY AND STUDENT BODY DEMOGRAPHICS WILL NECESSITATE:

1. Instructional and support service approaches which reflect and accept a diverse student body.

2. The availability of support services such as counseling, financial aid, and child care.

3. A specific focus on interpersonal skills, including communication, self-awareness, and the clear articulation of personal values.

4. Support services which provide "high touch" or "high contact" experiences (oriented toward personal growth).

5. Programs and requirements designed to significantly raise the level of basic skills.

6. The development of coping and adaptation skills.

7. Assessment of student talents, as well as academic aptitudes, in order to enhance the appreciation of the arts.

8. Opportunities to fulfill interests in the areas of health, fitness, and leisure activites.

9. Assisting older people with their educational needs.

10. Educating staff and students of the characteristics and concerns of the elderly.

COMMUNITY COLLEGE INSTRUCTIONAL PROGRAMS OF THE NEAR FUTURE WILL:

1. Approach education as a developmental process, and not one which is output based.

2. Identify and implement what needs to be taught in the future.

3. Stress general education and increase the "academic rigor" of offerings.

4. Utilize a wide variety of instructional methods.

5. Become increasingly individualized.

6. Be designed to facilitate self-taught learners.

7. Teach conceptual and logical thinking and creative problem-solving.

8. Be accessible to minorities who are not native-English speakers.

9. Be offered in a variety of settings and at a variety of times (year-round, flexible calendar, 7 days a week, 24 hours a day concept).

TECHNOLOGICAL CHANGES MAKE IT CRITICAL FOR COLLEGES TO:

1. Provide staff development opportunities for its faculty (sabbaticals, faculty exchanges, work exchanges).

2. Implement technological advances in the way instruction is delivered (computer-assisted, audio-visual systems, telecourses, etc.).

3. Utilize management information systems in the administrative process.

4. Develop and use advanced technology in the Learning Resource Center to make accessible large amounts of information.

5. Review existing vocational programs to assess relevance and effectiveness.

6. Require a strong basic general education (including analytical and synthesizing skills) for all students.

7. Introduce all students to the issues and impact of high technology (perhaps through interdisciplinary or thematic approaches).

A CHANGING WORK FORCE WILL INCREASE THE DEMAND FOR:

1. Identification of generic vocational education, as well as general education, that will enable workers to change and adapt more easily as their occupation becomes redefined in the future.

2. Educational opportunities for re-training and up-dating of occupational skills (lifelong learning).

3. Education to employees at the work site (both credit and contract courses).

4. Liaisons with business and industry representatives and the utilization of their expertise.

5. Graduates in the area of information and service industries, as well as the technological.

COLLEGE REPRESENTATIVES WILL RESPOND TO PUBLIC POLICY ISSUES BY:

1. Monitoring the public and political sentiment regarding a variety of community college issues.

2. Continuously reexamining the institution's mission and goals.

3. Increasing skills in alternative funding and resource-based planning.

4. Participating visibly in the community in order to acquire support and positive public relations.

5. Becoming political activists at the local and state level.

6. Providing leadership in professional organizations.

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OFFICE OF THE PRESIDENT
(209) 575-6061

LETTER TO COMMUNITY
LEADERS

December 21, 1983

Sent to list attached on date noted above:

We would like to ask your participation in an important project being conducted at Modesto Junior College. We are in the process of assessing the needs and characteristics of the residents of our service area and identifying trends and future directions. The results will facilitate the development of priorities for our instructional program.

One aspect of this process involves asking community leaders to express their ideas regarding what the college should be doing now and in the near future. In this time of serious financial constraint, especially, it is necessary that we examine our mission and goals and make decisions about the allocation of resources. The enclosed questionnaire has been developed to allow community leaders to contribute to this process.

Would you please take 15-20 minutes to complete the questionnaire and return it to us as soon as possible. Your response is critical since a limited number of community leaders have been identified and requested to participate. If you have questions about the process, or the questionnaire, please contact me or the Coordinator of Needs Assessment, Dr. Pam Fisher (575-6110 or 575-6063). She also will provide you with a summary of the results if you so desire.

You will note that signing the questionnaire is optional. However, we urge you to COMPLETE AND RETURN IT. Your response and that of others will assist us in making some program decisions in the very near future. Your timely, thoughtful response is essential.

Thank you for your assistance.

Sincerely,

Louis E. Zellers
President

jt
Enclosure

MODESTO JUNIOR COLLEGE • 435 COLLEGE AVENUE • MODESTO, CA 95350

QUESTIONNAIRE
TO
COMMUNITY LEADERS

THE ROLE OF MODESTO JUNIOR COLLEGE

DIRECTIONS: Please answer the following questions to the best of your ability. Return the completed questionnaire in the enclosed envelope.

1. **How many years have you lived in this county?**

   _____ 0-2 _____ 6-10 _____ more than 15

   _____ 3-5 _____ 11-15

2. **What is your current occupational affiliation?**

   _____ Business _____ Industry _____ Education

   _____ Professional _____ Service _____ Other _____

   _____ Government _____ Community Service Volunteer _____

3. **What is the approximate size of your local organization?**

   _____ Less than 25 persons _____ 51-100 persons

   _____ 26-50 persons _____ More than 100 persons

4. **What is the highest level of formal education you have completed?**

   _____ Graduate degree _____ Some college

   _____ Bachelor's degree _____ High school diploma

   _____ A.A. (2yr.) degree _____ Less than high school diploma

5. **Check all those factors which are true of your association with Modesto Junior College.**

   _____ Former student _____ Advisory committee

   _____ Family member a student _____ Reputation only

   _____ Attended non-class activities _____ None

   _____ Know faculty or staff

6. **What is your primary source of current information about MJC?**

   _____ Friends _____ T.V.

   _____ Newspaper _____ Direct mail

   _____ Radio _____ Other: _____

(continued on back side)

7. **Which of the following do you consider to be appropriate functions of the community college?**
Check as many as you believe apply.

Students should be able to:

_____ Obtain a general education (a broad-based curriculum leading to the two-year degree, A.A. or A.S.)

_____ Develop job and career skills (through technical-vocational programs)

_____ Take transfer courses in order to continue at a four-year college upon completion at MJC

_____ Utilize student support services (counseling, academic and career advising, testing, health and disabilities)

_____ Correct basic academic skill deficiencies which prevent them from doing college level work

_____ Continue lifelong learning, returning to MJC as needed or desired throughout adulthood

_____ Participate, along with other community residents, in cultural, recreational and special interest groups

_____ Other: _____

8. **Please rank the following possible functions of a community college according to what you believe should be the highest priorities.** (1 = highest, 8 = lowest)

Students should be able to:

_____ Obtain a general education (a broad-based curriculum leading to the two-year degree, A.A. or A.S.)

_____ Develop job and career skills (through technical-vocational programs)

_____ Take transfer courses in order to continue at a four-year college upon completion at MJC

_____ Utilize student support services (counseling, academic and career advising, testing, health and disabilities)

_____ Correct basic academic skill deficiencies which prevent them from doing college level work

_____ Continue lifelong learning, returning to MJC as needed or desired throughout adulthood

_____ Participate, along with other community residents, in cultural, recreational and special interest groups

_____ Other: _____

9. **For each of the following possible functions of a community college, rate the performances of MJC by indicating the degree of success you believe has been achieved. Use the following scale:**

1. Very successful 2. Successful 3. Not sure 4. Unsuccessful 5. Very unsuccessful

Students have been able to

_____ Obtain a general education (a broad-based curriculum leading to the two-year degree, A.A. or A.S.)

_____ Develop job and career skills (through technical-vocational programs)

_____ Take transfer courses in order to continue at a four-year college upon completion at MJC

_____ Utilize student support services (counseling, academic and career advising, testing, health and disabilities)

_____ Correct basic academic skill deficiencies which prevent them from doing college level work

_____ Continue lifelong learning, returning to MJC as needed or desired throughout adulthood

_____ Participate, along with other community residents, in cultural, recreational and special interest groups

_____ Other: _____

Please use the following scale to indicate the extent to which you agree or disagree with the following statements.

1. Strongly agree 2. Agree 3. Mixed feelings 4. Disagree 5. Strongly disagree

10. _____ MJC should offer remedial courses designed to prepare students for college level work.

11. _____ MJC should limit enrollment in college credit classes to persons with skills above the eighth grade level.

12. _____ MJC should limit enrollment in college credit classes to persons with skills above the sixth grade level.

13. _____ Enrollment in college credit classes should not be limited on the basis of general academic skills.

14. _____ MJC should offer classes in "adult education" (elementary and high school level work).

15. _____ MJC should be responsible for teaching English as a Second Language to those adults who need it.

16. _____ MJC should give higher priority to programs designed for local residents.

17. _____ MJC should consider the cost of programs when developing priorities.

18. _____ MJC should consider reducing or eliminating programs when the costs incurred exceed the revenues generated.

19. _____ Maintaining a quality program requires competitive expenditures in the areas of staff, equipment, and supplies.

20. _____ A quality educational program requires staff salaries that are competitive with those available in the private sector.

21. _____ Community and junior colleges should charge a moderate tuition in addition to existing fees (i.e., health, parking, materials)

22. _____ Community and junior colleges should be financed primarily by local sources of revenue.

23. _____ Community and junior colleges should be controlled primarily by local authorities.

24. _____ State funding for individual instructional programs should be based on the costs of offering those programs.

25. _____ When making a decision about whether or not to continue or to develop an instructional program, the following factors are important: *(Select as many as you wish)*

_____ Demonstrated demand

_____ Cost of the program

_____ Consequent reductions in other programs

_____ Career opportunities

_____ Creates increased enrollments in other areas

_____ Other: _____

26. _____ Business and industry in the community have a responsibility for the financial support of vocational programs related to their special interests.

27. _____ The community-at-large should be urged to contribute to the college through major fund-raising efforts.

28. _____ Major efforts should be made to maintain the number of the college's offerings even if it means a dilution of the quality of those offerings.

29. _____ Emphasis should be placed on protecting and improving the quality of programs retained even if it means reducing the number of offerings.

30. _____ MJC should offer academic programs that compete with those available through private, for-profit, businesses or organizations.

31. _____ MJC should offer on-site, user-fee supported programs to businesses, industries, offices, etc.

32. _____ It is important that MJC continue to be a comprehensive community college fulfilling many purposes and needs.

33. _____ In a time of financial constraint, the college may no longer be able to be "all things to all people."

If you need additional space to answer the following questions, please attach another page.

1. **What suggestions do you have for making MJC more effective in meeting the needs of community residents?**

2. **What major changes do you foresee for the Modesto area in the next five years?**

3. **What recommendations would you make for MJC to prepare for this future?**

4. **What do you believe MJC is doing especially well?**

5. **Comments or reactions:**

THANK YOU FOR YOUR ASSISTANCE!

If you wish your responses to remain anonymous, please return the enclosed card, separately from this questionnaire, so that we do not continue to ask for your participation.

If you do not mind, we would like to know your name so that we may contact you in the future, if appropriate, regarding the issues or ideas upon which you have commented.

Name _____

Address _____

Phone _____

QUESTIONNAIRE TO MJC FACULTY

***Directions: Please answer the following by** marking the appropriate space*

1 **Which of the following do you consider to be appropriate functions of the community college? Check as many as you believe apply**

Students should be able to:

_____ Obtain a general education (a broad-based curriculum leading to the two-year degree, A.A. or A.S.)

_____ Develop job and career skills (through technical-vocational programs)

_____ Take transfer courses in order to continue at a four-year college upon completion at MJC

_____ Utilize student support services (counseling, academic and career advising, testing, health and disabilities)

_____ Correct basic academic skill deficiencies which prevent them from doing college level work

_____ Continue lifelong learning, returning to MJC as needed or desired throughout adulthood

_____ Participate, along with other community residents, in cultural, recreational and special interest groups

_____ Other: _____

2. **Please rank the following possible functions of a community college according to what you believe should be the highest priorities.** (1 = highest, 8 = lowest)

Students should be able to:

_____ Obtain a general education (a broad-based curriculum leading to the two-year degree, A.A. or A.S.)

_____ Develop job and career skills (through technical-vocational programs)

_____ Take transfer courses in order to continue at a four-year college upon completion at MJC

_____ Utilize student support services (counseling, academic and career advising, testing, health and disabilities)

_____ Correct basic academic skill deficiencies which prevent them from doing college level work

_____ Continue lifelong learning, returning to MJC as needed or desired throughout adulthood

_____ Participate, along with other community residents, in cultural, recreational and special interest groups

_____ Other: _____

3. **For each of the following possible functions of a community college, rate the performances of MJC by indicating the degree of success you believe has been achieved. Use the following scale:**

1. Very successful 2. Successful 3. Not sure 4. Unsuccessful 5. Very unsuccessful

Students have been able to

_____ Obtain a general education (a broad-based curriculum leading to the two-year degree, A.A. or A.S.)

_____ Develop job and career skills (through technical-vocational programs)

_____ Take transfer courses in order to continue at a four-year college upon completion at MJC

_____ Utilize student support services (counseling, academic and career advising, testing, health and disabilities)

_____ Correct basic academic skill deficiencies which prevent them from doing college level work

_____ Continue lifelong learning, returning to MJC as needed or desired throughout adulthood

_____ Participate, along with other community residents, in cultural, recreational and special interest groups

Other _____

Please use the following scale to indicate the extent to which you agree or disagree with the following statements

1 Strongly agree 2 Agree 3. Mixed feelings 4 Disagree 5 Strongly disagree

4. ____ MJC should offer remedial courses designed to prepare students for college level work.

5. ____ MJC should limit enrollment in college credit classes to persons with skills above the eighth grade level.

6. ____ MJC should limit enrollment in college credit classes to persons with skills above the sixth grade level.

7. ____ Enrollment in college credit classes should not be limited on the basis of general academic skills.

8. ____ MJC should offer classes in "adult education" (elementary and high school level work)

9. ____ MJC should be responsible for teaching English as a Second Language to those adults who need it.

10. ____ MJC should give higher priority to programs designed for local residents.

11. ____ MJC should consider the cost of programs when developing priorities.

12. ____ MJC should consider reducing or eliminating programs when the costs incurred exceed the revenues generated.

13. ____ Maintaining a quality program requires competitive expenditures in the areas of staff, equipment, and supplies.

14. ____ A quality educational program requires staff salaries that are competitive with those available in the private sector.

15. ____ Community and junior colleges should charge a moderate tuition in addition to existing fees (i.e., health, parking, materials).

16. ____ Community and junior colleges should be financed primarily by local sources of revenue.

17. ____ Community and junior colleges should be controlled primarily by local authorities.

18. ____ State funding for individual instructional programs should be based on the costs of offering those programs.

19. ____ When making a decision about whether or not to continue or to develop an instructional program, the following factors are important: *(Select as many as you wish)*

____ Demonstrated demand	____ Career opportunities
____ Cost of the program	____ Creates increased enrollments in other areas
____ Consequent reductions in other programs	____ Other: _____

20. ____ Business and industry in the community have a responsibility for the financial support of vocational programs related to their special interests.

21. ____ The community-at-large should be urged to contribute to the college through major fund-raising efforts.

22. ____ Major efforts should be made to maintain the number of the college's offerings even if it means a dilution of the quality of those offerings.

23. ____ Emphasis should be placed on protecting and improving the quality of programs retained even if it means reducing the number of offerings.

24. ____ MJC should offer academic programs that compete with those available through private, for-profit, businesses or organizations.

25. ____ MJC should offer on-site, user-fee supported programs to businesses, industries, offices, etc.

26. ____ It is important that MJC continue to be a comprehensive community college fulfilling many purposes and needs.

27. ____ In a time of financial constraint, the college may no longer be able to be "all things to all people."

MJC FACULTY
WORKSHOP REPORT

February 16, 1984

TO: MJC Faculty and Staff

FROM: Needs Assessment Task Force:
Pam Fisher, Coordinator
Steve Collins
Stan Hodges
Jeanne Palmie
Don Roe
Patricia Wirth

SUBJECT: SUMMARY OF FACULTY DISCUSSION GROUPS

On February 1, 1984, a faculty workshop entitled "Planning for the Future" was held and research results regarding environmental trends and the mission and goals of community colleges were presented. As a part of that workshop, faculty participated in discussion groups where they were asked to identify additional implications of the research for specific college activities.

A summary of those implications and specific suggestions is attached. Two groups discussed each of the five questions and the summary represents a consolidation of the reports. It should be noted that the lists are sometimes the product of a brainstorming session and not necessarily a consensus.

The entire summary will be included in the appendix of the final version of the Environmental Assessment Report. You may obtain additional copies of the draft report from members of the Task Force. The final version will be available after March 6.

The Task Force is recommending to the President that he identify staff members responsible for each of the areas addressed by the implications and that those persons begin a process to prioritize the suggestions and methods of implementation. Faculty, thus, will be involved further in that process, especially as it relates to curriculum development.

Thank you for your participation and assistance in making the faculty workshop a success!

jb
Attachment

SUMMARY OF FACULTY DISCUSSION GROUPS

QUESTION: WHAT ARE ADDITIONAL IMPLICATIONS FOR COLLEGE POLICIES AND PROCEDURES?

1. A permanent high-powered community advisory committee should be established.
2. Alternatives for funds (including grants) should be aggressively sought.
3. Industry dollars should be used to support vocational programs.
4. Contract education in business and industries needs to be developed.
5. Advising should be mandatory.
6. There is a need for college-wide testing.
7. Placement in courses should be restricted and remedial courses available if necessary.
8. Liberal arts should be promoted even for those with semi-skilled occupational goals.
9. The needs of the transfer student are overemphasized.
10. Priorities should be given to local students.
11. All faculty need to emphasize writing skills with their students.
12. Incentives (including money, released time, and opportunities) for faculty retraining need to be provided.
13. The college should make a major effort to prepare for these major trends.

QUESTION: WHAT ARE ADDITIONAL IMPLICATIONS FOR INSTRUCTION?

1. We can no longer conduct "business as usual."
2. Students will need general education, including communication and critical thinking skills, in order to cope with the future.
3. Vocational and liberal arts education should be more integrated.
4. We need distinctions and discussion of the relationship between job training, vocational education, and general education.
5. We will need to educate students who seek job training as to the value of general education.
6. The central purpose of the college is the creation of the educated person.
7. There is a need to identify what is most critical to be learned.

8. It is futile to "chase" technology as we do not have the resources to have "state-of-the-art" equipment.

9. We must be cautious in interpreting job market statistics.

10. Since there will be no lifetime careers, colleges will have to be prepared to provide lifelong education.

11. In the move toward self-instruction, caution is necessary as the teachers' role is still critical, particularly where self-motivation is low.

12. We must obtain quality without placing unreasonable demands on students.

13. Any "wholesale" changes in procedures should be preceded by careful study.

14. The college already is implementing some of the report's recommendations.

QUESTION: WHAT ARE ADDITIONAL IMPLICATIONS FOR STUDENT SUPPORT SERVICES?

1. Faculty need an opportunity to learn more about the need and availability of student support services.

2. The community, prospective and current students need to be made more aware of available services and their value.

3. There may be a need for more resources in order to provide needed student services.

4. "Marketing" the college may require more specific targeting to certain populations.

5. The responsibility for provision of student basic skills needs to be clarified.

6. All instructors are responsible for emphasizing reading, writing, speaking, and thinking.

7. Faculty should be surveyed to determine what they actually require in terms of basic skills.

8. Ways of better utilizing the Learning Skills Center should be identified.

9. Advising is critical and should be on a one-to-one basis.

10. Interdisciplinary efforts involving instructors and counselors could benefit students.

11. Placement and retention policies should continue to be studied.

QUESTION: WHAT ARE ADDITIONAL IMPLICATIONS FOR FACULTY DEVELOPMENT?

1. The college administration should create an "enabling" attitude for faculty development including the provision of financial support and released time.
2. There should be planned regular opportunities for forums, seminars, and workshops leading to professional development through an exchange of ideas and teaching strategies.
3. Faculty must be encouraged to participate in conferences related to their areas of expertise in order to keep up-to-date.
4. Staff development opportunities should be provided for classified staff.
5. The college should cooperate with industry for job exchanges, workshops and in-servicing.
6. Faculty should be involved in goal-setting and regular objective evaluating.
7. Innovation in instruction will require college support of faculty development.
8. Faculty will need assistance in developing strategies for coping with very large groups, small groups, and groups of students with a wide age range.
9. Faculty will need to develop skills useful in flexible scheduling, computer-assisted instruction, and television instruction.
10. Technological advances should be integreted into management information systems in order to free instructor time for professional activities.
11. The college needs someone to distribute information and provide assistance regarding the availability of grants.
12. The college needs a campus researcher to assist in these activities.

QUESTION: WHAT ARE ADDITIONAL IMPLICATIONS FOR PUBLIC POLICY AND COMMUNITY RELATIONS?

1. The college must make a deliberate effort to "showcase" itself to the community.
2. The college must improve its image as a "college."
3. College leaders need to work for a permanent source of funding.
4. College representatives should work with other colleges to communicate with the Legislature.
5. There should be a distinct policy on fund-raising and a coordination of efforts.
6. Grants and other sources of revenue should be actively pursued.
7. College representatives should be leaders in the community.

8. Research related to the community and college should be on-going.

9. Identified staff and their responsibility for public information, and community outreach efforts, should be made known.

10. An information center and officer should be established.

11. Recruitment of students must be professionally conducted and given a high priority.

12. Timely, accurate information should be made available to faculty and community.

13. The efforts of divisions, groups, clubs, etc., need to be coordinated.

14. The college (including faculty) should work more closely with local highschools.

15. The college needs well designed, appropriately placed signs and maps.

16. "First" contacts with the college (admissions, testing, counseling, business office) should be positive, characterized by pleasantness, efficiency, and aesthetics.

17. To reach the community, the college could implement a "speaker's bureau," a traveling "show," and better use of the media.

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